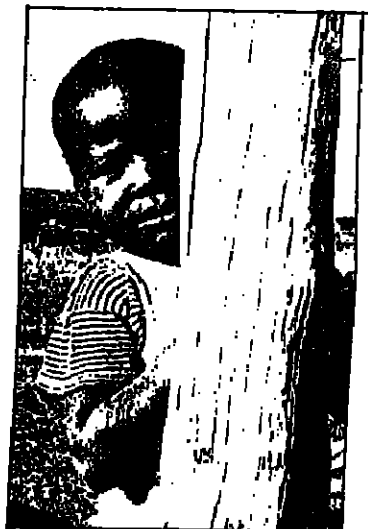


No business like research business. From Silicon Valley to The Triangle, American universities are stretching to attract high-technology industries to their campuses. Peter David investigates the HIGH-TECH BOOM (page 10)



"The Lord has gone from this place..." Robin Hallett describes the harshness of life at a boarding school, the policy of FORCED REMOVAL, and examines the pioneering research done by the Surplus People Project (page 11)

Bruce Spencer argues the need for a new, informed debate about TRADE UNION EDUCATION, not just the tacit acceptance of cutbacks and 'employer-endorsement' (page 12)

This month's ARTS PAGE looks at John Barton's television series *Playing Shakespeare* and at a stunning new opera by George, a singer 'with a voice like melted chocolate' (page 13)

The 1940s saw the zenith of the LABOUR PARTY in Britain, a period now coloured with nostalgia for unity and success. Stuart Walkland reviews Henry Pelling's study of the Labour governments of 1945 to 1951 (page 14)

Home news	1-7
Letters to the editor	2
Don's Diary (Michael Cardy)	4
Party Line (Jack Straw)	6
Union View Diana Warwick, AUT)	7
Overseas news	8
Articles	9-12
Column (Ernest Boyer)	12
Arts page	13
Books	14-17
Noticeboard	18
Classified advertising	19-23

NEXT WEEK

Design education: past and present
Maurice Chazan on the history of intelligence testing

Published by Times Newspapers Ltd., P.O. Box 7, 201 Gray's Inn Road, London WC1X 9EZ, England. Typesetting by Computer Graphics Ltd., 37, Clapton Road, London E5 8PP, and printing by Northampton Mercury Co. Ltd., Upper Mount, Northampton NN1 3JH. Printed on acid-free paper at the Post Office. ISSN 0022-2533

HIGHER EDUCATION SUPPLEMENT
Priory House, St John's Lane, London EC1M 4BX. Telephone 01-253 3000

Towards a common culture I

'There'll always be an England'

Culture is one of the most difficult words in the English language and its growing popularity, not least in academic circles, has added to this difficulty. Most people outside higher education still use culture in an aesthetic sense; it is what happens at Stratford, or in the Royal Festival Hall, or all over Edinburgh for three summer weeks. Many people inside higher education in contrast have come to use it in a quasi-anthropological sense to describe the tribal customs of those who live on Sunderland council estates or go to the races at Ascot.

But culture can also be used in an intermediate sense, to mean something less intense and elitist than the museum culture of the past and the high culture of the present yet something more prescriptive and discriminatory than the life style of modern tribes. From before Matthew Arnold to after T. S. Eliot culture has been used in this more ontological sense; it did not aspire to be synonymous with grand civilization but the idea contained sufficient moral impulses to make a claim to represent the continuity of historical and collective virtues.

Almost certainly this is what the Robbins committee had in mind when it suggested that the fourth aim of higher education was "the transmission of a common culture and common standards of citizenship." Even a generation ago the committee had to half-apologize for using language that already seemed anachronistic but it nevertheless insisted: "We believe that it is a proper function of higher education, as of education in schools, to provide in partnership with the family that background of culture and social habit upon which a healthy society depends."

How much more difficult it would be to write those words today. If our grip on the idea of a common culture had already become slack in 1963 and if our confidence that higher education had a significant contribution to make to sustaining, as opposed to investigating, that culture had already been shaken, 21 years later our grip is now feeble and our confidence almost gone. Yet for Lord Robbins, who died earlier this summer, the transmission of a common culture was perhaps the most important of the aims of higher education. And in an incoherent but eloquent sense many parents, students, teachers have ultimate hopes of higher education that can be embraced in a similar phrase. Beneath the layers of academic specialization and vocational ambition a simpler and more generous faith often still lies hidden.

So an attempt to explore the idea of a common culture in late twentieth century Britain may still be worthwhile. At any rate this is what will be collected over the next four weeks, to collect together a few notes on our common culture and to investigate that territory where knowledge, hope and custom come together. My subject is that dense background of ideas against which we live and of which we are barely aware. This week I will try to discuss the peculiarity of the British, the jumble of pragmatism, fraternity, sentimentality of which we are accused and for which we have been praised. Next week my subject will be the rise and fall of the great quasi-religious ideologies that flourished in nineteenth and twentieth century Europe. On August 17 the focus will be on the triumph of postwar pragmatism, and finally on August 24 this series of essays will end with some reflections on the new diaspora of ideas and the splintering of our common culture.

At the end of *Homage to Catalonia* George Orwell (well, it is 1984) describes his return from the Spanish civil war in terms that emphasize the peculiarity of English culture and the British experience. It was as if the

bitter fighting of communists, anarchists, syndicalists, and fascists was taking place in another world. The killing passion represented by the dead bodies in the Barcelona streets did not seem to belong in the same place and time as the gentle, genteel even, banality of the bank holiday crowds in Brighton or Blackpool.

It is easy enough to accumulate literary anecdotes like this that illustrate the apartness of the British. But the rhetorical force of this accumulation of evidence of our peculiar culture is not matched by equal clarity about how apart, why peculiar? The culture of France can be described in terms of Descartes, Molière, Napoleon - and perhaps in this century De Gaulle and Sartre. That of Germany in terms of Kant, Hegel (and Hitler?). Italy has its Garibaldi, Croce, and Gramsci. And so on through the nations of continental Europe.

But what are the equivalent totems of the culture of the British? Is the Tory traditionalism of Jane Austen more authentic than the progressive idealism of George Eliot? Is not the socialist Clement Attlee in some important sense a more English figure than the imperialist Winston Churchill? William Cobbett or Walter Scott? Huxley or Arnold? The inescapable conclusion seems to be that however sharp the external boundary of Englishness, in a linguistic not national sense of course, its internal contours are difficult to detect. Our native culture seems at once so eloquent and so indeterminate.

One obvious explanation is that because political and ideological contests have been so much milder in Britain than in the rest of Europe since the eighteenth century there has been less need to suppress components of our national culture. The last decisively excluded group was probably the Jacobites - and even their values were partially rehabilitated in the wake of the reaction against the French Revolution and the growth of romanticism. All subsequent minority strands of national opinion, although often persecuted, hung on to some shreds of legitimacy. As a result our culture in contrast to that of many of our neighbours tends to be inclusive rather than exclusive.

In this the British are exceptional. What place in the culture of modern Italy could be found for the (many) supporters of the Bourbons and the Hapsburgs? The desperation and incoherence of the French right may be explained in part by the way in which after 1789 the rules of the national culture were tried against them. Even in the United States the Confederate defeat in 1865 left the American south excluded in some subtle and oblique way for almost a century. Only in our relations with Ireland have we faced the poisonous issues of demarcation and discrimination with which other national cultures have always had to grapple. A few would argue that Scotland and Wales have also been incorporated dishonestly in a British state dominated by the English and their native prejudices suppressed. But the failure of these nationalists to attract majority support and their lack of rancour, seem to demonstrate the opposite conclusion: that our national culture, whether English or British, is a broad church that can easily embrace separate traditions within the wide territory of "us".

The quietism and breadth of our culture may help to explain its most prominent characteristics. First, the tendency to adopt for a moment the language of 1960s California, the space which it affords us. Deviancy is not seen as such a terrible threat. Looking back it is not surprising that the counter-culture - pop music and all the rest - found a more comfortable home in Britain than almost anywhere else. In intellectual life our culture has encouraged a similarly easy-going tolerance of different opinions and traditions - but is tolerant that at times

shades into a philistine indifference. This suggests that it owes as much to a historical experience which seems to persuade us ideas are never worth fighting over as to any positive commitment to intellectual or cultural pluralism. Closely linked no doubt is our sympathy for idiosyncrasy.

Cynics would add that this impression of intellectual "space" has to be set against the dominant background of an essentially conformist intellectual culture in which the easy complacency of the various establishments is explained by their strong sense of secure superiority. They may create the intellectual thrills in their discipline but are denied access to its commanding heights, just as bankers smoothly maintain their historical predominance over manufacturers. Certainly the philistinism and the conformity have to be balanced against the breadth and idiosyncrasy of English culture. They may only be a reflection of that larger paradox in the British character in which an anarchic individuality and communal fraternity are curiously blended.

A second characteristic of our culture is its retrospective quality. We never seem to be far away from our history, but history in the sense of the continuity of everyday life is not *la gloire*. Ours is a quiet and civilian culture in which images like the sailing of the Falklands take force into the Portsmouth sunset have played little part. We have no grand and paralyzing historical myths of *Revanche* or *Risorgimento* or revolution to bind our present. Nor are the English imprisoned by the stubborn traditions of an ancient pre-industrial culture; the industrial revolution was so long ago and so complete that our agrarian past has vanished for ever.

Yet our sense of history - it could be called "space" to balance the Californian-style "space" - has remained. Personal, intimate, unselfconscious, family and community inspired rather than public, heroic, deliberate, or nationalistic maybe but still one of the most creative agents in the making of English culture in 1984. Retrospection, a very different quality from continental European reaction, has been a consistently key characteristic of English art, thought and life since at least the early nineteenth century: Jane Austen celebrating a traditional squirearchy menaced by metropolitan novelty and imminent industrial change; Walter Scott recreating "the sixties years since" in *Waverley*; George Eliot feeding her creative imagination on memories of a childhood in the pre-industrial Midlands; Houseman's "blue remembered hills"; Richard Hoggart recalling growing up in working-class Leeds in *The Uses of Literacy*. At times of course such retrospection has degenerated into mawkishness and sentimentalism. But even these must be included among the components of our common culture.

A third characteristic of our culture is our traditional distrust of theory and abstraction and our leaning towards pragmatism, is probably closely linked with this strong sense of "place". The lived experiences of history, especially of history on a private and intimate scale, do not encourage abstract thought. Moreover the patterns made by history provide an alternative framework in which ideas and experiences can be organized. They offer as it were a concrete theory. Rab Butler's maybe banal *The Art of the Possible* or Alec Douglas Home's amiable autobiography with its preoccupation with fishing on the Tweed takes us much closer to the heart of British conservatism than the doctrines of monetarist economists or the intellectual antics of the Peterhouse set. For conservatism is as much a set of historically determined values as a collection of ideas abstracted from a theory. In the end Mr. Pym has to win - or there is something wrong with the clockwork of our history.

It is the same story on the left. The clichéd remark that organized Labour owes more to Methodism than to Marx may be more revealing about the mentality of those who make and mark it than in terms of historical accuracy. But the progress of the left is conventionally seen in terms of Levellers and Luddites, Tolpuddle and the General Strike. Cynics - Marxists, deconstructionists and the rest - will argue of course that historical memory is just insidious form of theory, that written by winners so they can win again. Maybe, but it still has a lived-in and concrete quality that formal theory and explicit myth do not possess.

A fourth characteristic of our culture is our preoccupation with the aesthetic as much as the rational. Feeling, especially if it is expressed within the canons of civilized conduct, is regarded as equal if not superior to intelligence. Or rather the reconciliation of art and life, feeling and intelligence within an aesthetic framework that is also a moral code is regarded as the first task of civilization. This view of British culture has been expressed most vehemently (and intolerantly) by the Leavisites. But even those who reject such an interpretation must recognize that the centrality of the novel, and of essays and history both with strong literary ambitions, is significant evidence of the aesthetic strand within our culture.

From this aesthetic quality flow two subsidiary characteristics, our idealism and our anti-practicality. Both are clearly stimulated by the culture which places a higher value on appreciating and improving the quality of individual or community experience than on detached and even amoral analysis of the situation of society. The results are good and bad: on the positive side it helps to explain our weak sense of the state but our strong sense of community (whether street, town, guild or trade union) and our enthusiasm for collectivism in the form of fraternity and our distrust of it in the form of mechanistic misanthropy; on the negative side it is clearly an ingredient in the stubborn anti-entrepreneurial streak in British life.

Some critics will dispute this essentially benign and even tranquil account of our culture. They may regard it as not much more than a repackaged interpretation modified to explain our more recent, and relative, decline from national greatness. Such criticism would be fair if any claim had been made to present a complete account in however general terms of English culture. But the inclusiveness which is its first and perhaps predominant characteristic makes a complete account impossible. (Almost) anything goes. But such catholicity is not without influence. English intellectual life has always been such a mess that there have been few clear winners. So on this side of the channel the great predatory ideologies have had to learn to coexist. The best example perhaps is Marxism, on its return to Britain it has been softened and smoothed, even "young native".

However, it is possible to overestimate the peculiarity of our national culture. We have never been cut off from Europe and the rest of the world in cultural terms. Ours is simply a component of a broader international culture. Yet our particular likes and dislikes, preoccupations and prejudices, may have distinctive dangers in that broader ideology. Imperialism in that predatory ideology is inherent in that broader culture, the sense of "space" and "place", and aesthetic-moral preoccupations to the latter.

Peter Scott

NEXT WEEK: "Men are grown mechanical..."

The Times Higher Education Supplement

August 10, 1984 No 614 Price 60p

Research morale at a low ebb

by Jon Turney
Science Correspondent

A dismal picture of declining morale among university researchers and peer review groups struggling to make finer distinctions emerges from the Science and Engineering Research Council's study of unfunded grant applications.

The study group's full report confirms that the council's inability to fund all the great proposals rated "alpha" by review committees is undermining the British research community's ability to undertake fundamental research to the highest international standards.

The group found that the traditional mechanism of backing unsolicited proposals was most at risk as long term commitments to special directorates in engineering or central facilities run by the SERC science board were relatively protected.

The result, according to the report, is that morale is low in most areas of the academic community, and there is a growing sense of frustration, or even rage, at what is viewed as an unwillingness on the part of the SERC to fund first rate research. At the same time, the report shows council review committees trying to grade and sift proposals they would normally fund automatically.

The report says: "Peer review groups are faced with the unacceptable task of choosing only a few of a number of research grants which are all classified as first rate research." It cites a recent subcommittee meeting in chemistry which classified 32 out of 66 proposals as alpha quality but could only fund eight of them.

Expedients tried by different committees include reducing all awards, keeping some at high levels while reducing others, or shortening the period of support. The study group saw some of these measures as a solution - only extra money will suffice.

The proportion of unfunded alphas varies across the SERC's boards and committees, with mathematics in the lead at 49 per cent, followed by physics and chemistry some way behind on 28 per cent and 29 per cent respectively. The figure for biology was 17 per cent, the same as the 1982/83 level of alphas turned down by the astronomy, space and radio board.

In place, the study found there was no alternative source of funds in the vast majority of cases. If grants were not backed by the SERC, they were not backed at all. This led to breaks in continuity of research programmes and loss of timeliness of promising proposals. Some researchers found this a catch if they resubmitted applications, with proposals formerly graded alpha coming out next year as beta, or outright rejections.

In engineering and materials science, there were more prospects of alternative backing from industry, and from other sources. But the consultants who advised university departments for the study group reported that this could be a catch if they resubmitted applications, with proposals formerly graded alpha coming out next year as beta, or outright rejections.

Apart from more money, the study group calls for monitoring of movement of researchers from the UK, closer contact between peer review groups and university researchers to help them understand reasons for rejection, and more use of research students in place of research assistants.

The group also comments on the difficulty of compiling data on grant applications and awards and suggests that the SERC pay a computerized information retrieval system.

Ministers bid for extra science cash

by Paul Flather

Ministers and civil servants are preparing a joint bid to the Treasury for substantial extra funds to help pay for the switch towards more scientific and vocational relevant courses in higher education.

The bid will be put before Treasury officials in September and October when this year's public expenditure bilateral talks begin in earnest. It will be backed by the Department of Employment and the Manpower Services Commission.

No figures for the size of the bid have yet been fixed although officials concede that earlier demands for an extra £400m requested by industrialists and engineers are now widely optimistic. But they also stress that anything less than £500m would have little impact.

All ministers are convinced of the need for the extra funds to help meet growing skill shortages, particularly in the fields of information technology and engineering, as underlined by a report last month by a committee under Mr John Butler, under-secretary at the DTI. The Treasury has also conceded the shortages are a bottleneck in the planned British economic recovery.

The bid will still have to be judged alongside other

bilateral bids, but DTI backing must add considerable weight to the more usual DES approaches. It is also becoming clear that leading industrialists are preparing to lend financial support to promote the expansion and development of key scientific and computer courses.

Talks involving companies and a number of London University colleges and other higher education institutions to set up the first joint venture training centre are now well advanced. The Confederation of British Industry confirmed this week that it hoped to secure premises soon.

The CBI has already arranged a special one-day conference under the title "Partnership Change" in London on September 11 to promote more support from industrialists for proposals made in the Butler report to provide equipment and key executives to universities and polytechnics and to update and improve current technology courses.

The unequivocal DTI and CBI backing for extra money comes now that officials accept a simple switch from arts and humanities to science and technology, as first conceived, is just not possible. Any money released from ending library-based courses would just not meet the desired expansion in

expensive laboratory-based courses, even allowing for the long timespan needed.

Figures supplied by the DES also show that on current projections the switch from arts and social sciences to science and engineering will just not be large enough to meet shortfalls estimated by the Alvey Directorate to be 1,500 graduates already, rising to 5,000 by 1988.

The DES projections suggest that 24,500 science students will graduate in 1989/90, an increase of 1,700 on this year's total, along with 14,600 engineering students, an increase of 2,400. The decline in social science graduates is expected to be from 24,700 this year to 23,500 in 1989/90, and in arts from 24,700 to about 23,700. The figures reflect a slight overall drop in the total number of university and CNAAs graduates.

The DES has at least won the argument that a simple switch is just not possible. Even with extra funds the DES is cautious about immediate results noting that what matters eventually are A level choices at school. The DTI, however, remains convinced that if engineering and technology places are increased there will be sufficient demand to fill them.

Posthumous degrees halted

Cambridge University is not after all going to be able to confer degrees on Socrates, Shakespeare, Euclid, and Archimedes. The council of the senate has just ruled that posthumous degrees will not be awarded after all.

The issue was first raised in 1973 after a request from the parents of a third-year undergraduate who was tragically killed before he could formally collect his degree.

It appears that at least two such posthumous awards were made before the council discovered that under existing university statutes it could only "admit individuals to degrees". So in May the council put forward a formal proposal to allow the title of degree to be conferred posthumously.

Awards would be made primarily in cases where refusal might cause distress to the family, most usually when a student's name had appeared in the pass-lists but he or she had died before the degree could be collected.

But the proposal was roundly criticized at a senate meeting by dissenting council members who considered it incomprehensible, painful and full of anomalies.

Dr Rudolf Hanks of Wolfson College said a degree at Cambridge was an indication of the "class of membership" of an individual. It was incomprehensible to confer a degree on a deceased person.



The history of intelligence testing, 15

Local councils demand more money for capital projects

by John O'Leary

Local authority leaders on the committee of the National Advisory Body are to appeal to Sir Keith Joseph, Secretary of State for Education and Science, for more money to fund capital projects in polytechnics and colleges after refusing to allocate their existing budget.

A meeting of the committee held this week mainly to consider the NAB's long-term strategy plan, was expected to approve the distribution of almost £5m among 11 institutions. But it was decided to defer any decisions on the allocation until after an attempt to increase the amount available.

The NAB board had drawn attention to the inadequacy of the budget in making its recommendation on the projects to be allowed to proceed. It had proposed a staged programme in which the largest sum, £1m, would go on a new engineering block at Kingston Polytechnic.

Bids totalling almost £50m were received when the programme was announced and several projects would have accounted for the entire budget on their own. Even those classified by the NAB secretariat as of the highest priority would have cost £8m.

Committee members therefore de-

UGC bent on pharmacy closure

by Olga Wojtas
Scottish Correspondent

The University Grants Committee is to send a background paper containing criticisms of staff at Heriot-Watt University's pharmacy department to MPs who have been involved in the campaign to prevent its closure.

The committee announced last week that the department should close, despite previously asking for proposals on the reorganizing of pharmaceutical teaching.

The paper says that the distinguishing feature of any university department should be the recruitment of high quality students, taught by staff who are advancing the frontiers of knowledge through original research. Heriot-Watt staff, with one or two exceptions, were not, and had not in recent years been engaged in a research of quality, says the UGC. It felt that on the research side pharmacy fell below the minimum standard expected.

Certainly among all such departments, is the natural candidate for closure," says the UGC's paper. Under the university's new proposals, the UGC estimates only a third of students would go into industry, while

continued on page 3



NAB: the fantasy and the reality

It is to be hoped that when Sir Keith Joseph announces the future shape, role and remit of the National Advisory Body for Public Sector Higher Education (as it has become), he will take note of an interesting pair of front page articles in *The Times* on July 27.

In one it was reported that the NAB's continuing education group "... asks that the Department of Education and Science conduct an urgent review of financial support arrangements for full time mature students as it finds the current system discriminates against late entrants".

The second report was from the Committee of Vice Chancellors and Principals under Dr Burnett which had "... considered a loan scheme where students would repay through PAYE as an earnings related graduate tax".

The argument that mature students with greater family and financial commitments will be still further discriminated against under Dr Burnett's system is, I hope, an obvious one. But behind this issue lies a larger question - how much longer can we go on planning, organizing and inflating new approaches to the two sectors independently?

The NAB's existing terms of reference, simply call for "the establishment of effective liaison with the university, voluntary and direct grant sectors". One representative of the University Grants Committee sits as an observer on the NAB board.

While this could, I suppose, be construed as "effective liaison", would it be too much to hope that the permanent NAB will show a greater move towards interdependent planning and cooperation?

The effect of the cuts in university student numbers as a result of the 1981 UGC exercise on public sector intakes is surely a strong argument for transitory planning.

There are already several examples of transitory cooperation. Most recently the flexible system announced by Lomion University, Brunel University and the London Polytechnic under the auspices of the Council for National Academic Awards, for students over 21 wishing to enrol in 1985. In this instance, even with the problems of financial support that the NAB's continuing education group draw attention to, the institutions involved are still expecting nearly double their initial estimate of students to enrol.

An extension of "transitoryism" would have another important effect. It would make the establishment of a National Credit Transfer system that much easier and would by implication lead to the provision of more modular and extended courses which will be essential as the pace of technological change increases.

Being realistic however - what are we likely to see as the structure and remit of the permanent NAB? There will probably still be a strong imbalance of DES appointees.

Mark Hatton

The author is a member of the executive of the National Union of Students.

Letters to the editor

Paying dearly for US books

Sir, - I share the concern of your correspondent (*THES*, July 27) who found that a book costing \$25.95 in the United States had cost his university library about twice that allowing for the rate of exchange.

The prices of academic books and journals are being governed not only by the declining value of the pound against the dollar but by the practice of some publishers on both sides of the Atlantic setting prices in dollars aimed at exploiting their export markets.

This "loading" of prices in dollars even by British and European publishers is having a very serious effect on library budgets as well as on purchases by individual lecturers and students.

Journal subscription prices rise by 16 per cent between 1983 and 1984 (source: *Blackwell and Library Association Record*, May 1984) while the indications are that this inflation will rise to over 20 per cent next year. Book prices are rising at a similar rate. As libraries (whatever their source of funding) are unlikely to win increases in their budgets on this scale, there will continue to be cancelled subscriptions and few academic textbooks and monographs sold.

There are no easy solutions but perhaps UK publishers at least could contribute with more competitive pricing and attempt to reduce our increasing dependence on US publishers with wider and more up-to-date publishing programmes.

Yours faithfully,
N. S. MACARTNEY
Polytechnic Librarian,
Hatfield Polytechnic.

Sir, - With regard to Charles Jackson's letter, I can give another example from my own experience. I have just ordered a concordance, a very necessary tool for study. In the United States it is advertised at \$75 - in this country an old established bookseller advertises it at £109.70.

Yours faithfully,
DAVID BREWSTER
Theological and religious studies,
Southampton University.

Public hazard

Sir, - I am absolutely amazed by the article in *The Times* on the 27th July, under the heading "Public hazard", which describes the danger to the public from the waste of the Atomic Energy Research Establishment (AERE) at Harwell, Oxfordshire.

The article states that the AERE is "one of the most dangerous places in the country" and that "the waste is so dangerous that it is being treated as a public hazard".

On the contrary I am sure that the AERE is one of the safest places in the country. The waste is being treated in a safe and secure manner.

Yours faithfully,
SIMON GYNN
Hobcote, Midgehole, Hebden Bridge
West Yorks.

Job security

Sir, - As far as I can ascertain, most of those writing to *The Times* about the issues of tenure and academic freedom are those who have tenure. But what about those who do not?

Recent figures indicate that in the universities, for example, one quarter of all academic staff are on short-term contracts. Some are lecturers in one year or, if they are lucky, two or three years while others are on a search staff existing from month to month in the hopes of something more permanent.

The unfortunate thing is that temporary staff, because of their vulnerable position, are often afraid to speak out. And, tenured staff, because of their own lack of understanding of the temporary staff and of their own feelings of insecurity, are not always their best spokesmen. In addition, ideas about the relative merits of men and women in times of job shortage follow an all too familiar pattern. It is the jobs of women as well as married women with children and what about women who are pregnant?

The overwhelming impression is that it is women who are disproportionately the losers in this game. And that is a sad state of affairs which needs to be carefully analysed.

Yours faithfully,
JUNE PURVIS,
85 The Dale,
Widley, Portsmouth.

Independent

Sir, - Personal File on July 27 gave me a misleading impression that the Central Arbitration Committee is part of the Advisory, Conciliation and Arbitration Service. I should like to point out that in the performance of its functions the CAC is an entirely independent organization.

Yours faithfully,
MISS M. STAFFORD
Secretary, Central Arbitration Committee,
Great College Street, London SW1.

Cranfield leads defence training advance

by Paul Flather
A new Government contract for military science and engineering training is being awarded to Cranfield Institute of Technology which heralds further defence training contracts for higher education institutions.

Cranfield formally opened a second campus at the Royal Military College of Science at Shrivenham, Wiltshire, last week when a Ministry of Defence contract worth £40m over the next five years came into effect.

The contract covers all academic work at the college and means that about 2,000 students a year, including 850 British and many overseas serving officers, will carry the same status as a Cranfield degree. They used to be validated by the Council for National Academic Awards.

The new contract fits in with the efficiency drive by Mr Michael Heseltine, the Secretary of State for Defence, to secure value for money in all spheres of MoD activity through such steps as privatization, mergers, cost-cutting, and contracting out.

A series of reviews is being carried out by Mr Peter Levine, chairman of United Scientific Holdings and special adviser to the minister, and last year Major General J.P. Groom carried out a full review of British Army training, currently costing £341m a year and involving 14,000 Army staff (18 per cent) in the country plus 12,000 civilians. A ministerial response is still awaited.

Colonel John Parks, chief of staff at Shrivenham, underlines the expected benefits from greater flexibility. "Every time we wanted to put on a new course we had to put a well argued paper to the MoD and even then it may not have been given the clearance," he said. "Now Cranfield can just go out and find what is necessary if the need is there."

Shrivenham currently runs four specialist postgraduate MSc courses in military vehicle design, information systems design, guided weapons, and guns systems design, all likely to benefit from the new arrangements.

Other training areas which the MoD may decide are better run by higher education institutions include management training and stock control training, and the Royal Electrical and Mechanical Engineers training.

These studies could all emphasize the likely benefits for the defence forces in putting more out to contract along the Cranfield model. Already three main benefits are apparent for the Army: savings on central administration; greater flexibility in mounting new courses as technology changes; and incentives to earn revenue because it can be kept at Shrivenham.

Another inquiry into the training of army officers and soldiers is also being carried out by General Sir Hugh Bench, warden of St George's House, Windsor Castle. His brief is to make specific recommendations on how to make economies.

These studies could all emphasize the likely benefits for the defence forces in putting more out to contract along the Cranfield model. Already three main benefits are apparent for the Army: savings on central administration; greater flexibility in mounting new courses as technology changes; and incentives to earn revenue because it can be kept at Shrivenham.

Colonel John Parks, chief of staff at Shrivenham, underlines the expected benefits from greater flexibility. "Every time we wanted to put on a new course we had to put a well argued paper to the MoD and even then it may not have been given the clearance," he said. "Now Cranfield can just go out and find what is necessary if the need is there."

Shrivenham currently runs four specialist postgraduate MSc courses in military vehicle design, information systems design, guided weapons, and guns systems design, all likely to benefit from the new arrangements.

Other training areas which the MoD may decide are better run by higher education institutions include management training and stock control training, and the Royal Electrical and Mechanical Engineers training.

These studies could all emphasize the likely benefits for the defence forces in putting more out to contract along the Cranfield model. Already three main benefits are apparent for the Army: savings on central administration; greater flexibility in mounting new courses as technology changes; and incentives to earn revenue because it can be kept at Shrivenham.

Colonel John Parks, chief of staff at Shrivenham, underlines the expected benefits from greater flexibility. "Every time we wanted to put on a new course we had to put a well argued paper to the MoD and even then it may not have been given the clearance," he said. "Now Cranfield can just go out and find what is necessary if the need is there."

Shrivenham currently runs four specialist postgraduate MSc courses in military vehicle design, information systems design, guided weapons, and guns systems design, all likely to benefit from the new arrangements.

Other training areas which the MoD may decide are better run by higher education institutions include management training and stock control training, and the Royal Electrical and Mechanical Engineers training.

These studies could all emphasize the likely benefits for the defence forces in putting more out to contract along the Cranfield model. Already three main benefits are apparent for the Army: savings on central administration; greater flexibility in mounting new courses as technology changes; and incentives to earn revenue because it can be kept at Shrivenham.

Colonel John Parks, chief of staff at Shrivenham, underlines the expected benefits from greater flexibility. "Every time we wanted to put on a new course we had to put a well argued paper to the MoD and even then it may not have been given the clearance," he said. "Now Cranfield can just go out and find what is necessary if the need is there."

Shrivenham currently runs four specialist postgraduate MSc courses in military vehicle design, information systems design, guided weapons, and guns systems design, all likely to benefit from the new arrangements.

Other training areas which the MoD may decide are better run by higher education institutions include management training and stock control training, and the Royal Electrical and Mechanical Engineers training.

These studies could all emphasize the likely benefits for the defence forces in putting more out to contract along the Cranfield model. Already three main benefits are apparent for the Army: savings on central administration; greater flexibility in mounting new courses as technology changes; and incentives to earn revenue because it can be kept at Shrivenham.

Strike action follows

Aston sackings

by David Jobbins
Aston University is once more embroiled in a confrontation over compulsory redundancies after carrying out its threat to sack 40 non-teaching staff.

Compulsory redundancy notices have been sent to 36 technicians and four other non-teaching staff precipitating industrial action by members of the Association of Scientific, Technical and Managerial Staffs. They are believed to be the first in the mainstream of the university system.

The union claimed that its initial about strike action, taken immediately the notices were issued last Friday, had been effective in turning back a number of deliveries to the university. But it is now planning a campaign of selective strikes during what its leaders heavily admit is not the best time of the year for such action.

It is appealing to other campus unions not to undermine its action. The union is particularly angry that 13 of the technicians involved are trainees and that the university has told them it will not help them complete their training.

Mr Robert Duffy, ASTMS branch secretary at Aston, said: "The university is treating its employees in an appalling fashion. People just do not know where they are from one day to the next. We have lost hundreds of our colleagues already through voluntary means but we are not even sure this is the end of it."

He accused university personnel officer Mr Peter Tebbitt of "hoodwinking" the council meeting which authorized the action by suggesting that redeployment would make a significant contribution to eliminating manpower surpluses at Aston.

"Unfortunately there are only three technical vacancies within the university - to suggest redeployment as a realistic option is a joke."

Mr Tebbitt was unavailable for comment.

Unions to base arbitration case on productivity

Dramatic evidence of increased productivity by higher education lecturers is to be a main plank of the unions' case for better pay to be circulated to the arbitration panel next week.

In their submission, a draft of which has been passed to *The Times*, they claim that lecturers' cooperation with continued increases in efficiency has heavily dependent on proper pay levels and a fair salary structure.

The submission leans heavily on the work of the National Advisory Body's technical data group which found a 20 per cent improvement in "productivity" between 1982 and the coming academic year. But, the unions say, this comparative increase in efficiency has not been reflected in salary levels which have continued to decline on the values established first by Houghton in 1975 and partially restored in 1980.

Staff numbers in advanced further education remained constant with some 17,000 in the polytechnics while the number of students rocketed with 1983 year enrolments of home students up 7 per cent between 1981/82 and 1982/83. Despite a slump in overseas students - a 2 per cent drop compared with an increase of 3 per cent for the universities - the public sector retaining ahead of the universities in overall terms.

But, the unions say, salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

The unions say salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

The unions say salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

The unions say salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

The unions say salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

The unions say salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

The unions say salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

The unions say salaries have failed to keep pace with the retail price index and the two earnings indices. More than 12 per cent would be needed to match inflation since 1980.

US ahead on expenditure, says study

by Patricia Santinelli
Higher education expenditure in the UK is higher than in Japan and any other European countries, except the Netherlands, but only half the amount spent in the USA, according to a Department of Education and Science study.

The study, which compared the UK with six other countries in the Organization for Economic Cooperation and Development, France, Germany, Italy, Japan, the Netherlands and the USA, says that in 1980 we spent 1.2 per cent of our gross national product on higher education including student support. When this is deducted the figure is 0.9 per cent of the GNP.

On this basis, it would appear that the UK spends almost double the proportion of its GNP on higher education than France, Germany and Japan whose rates are respectively 0.7, 0.6 and 0.5 per cent. But the Netherlands, with a much smaller population, spends 2 per cent of its GNP and the USA 2.2 per cent.

The DES warns however that valid international comparisons are difficult to make because the way educational expenditure is allocated in the different sectors varies from country to country. For example, the figures for Germany and France are limited to expenditure by universities and the education ministries.

According to the study, the UK has the most generous arrangements for student support of any of the European countries considered, and is the only one to operate a system of grants which do not have to be repaid. Most other countries operate a mixed system of grants and loans while in Japan, student support is based entirely on loans.

The DES says that in 1979, the UK's average grant level of £1,000 per full time student was higher than any of the other countries. It was 28 times that of Italy, 11 times that of the USA, six times that of France and five times that of Germany.

In terms of new entrant participation rate to higher education, the DES says the UK has an estimated rate of 40 per cent if entrants to private establishments and correspondence courses are included. This compares with 35 per cent in Japan and 62 per cent in the USA where similar data have been incorporated.

But even excluding such data, the UK's participation rate at 31 per cent compares well with 25 per cent in Italy and 20 per cent in Germany and is relatively on par with that of France at 34 per cent.

However the participation rate of women in terms of the overall percentage of total enrolments is low both in the UK and Japan compared to the other countries considered. In the USA the participation rate was 51 per cent, in France 46 per cent and in Germany 41 per cent compared to the UK's 37 per cent and Japan's 34 per cent.

The UK's graduation rate from higher education is on par with that of France and Germany but about half the level found in the USA which includes graduations from private colleges. The rates for the UK and Germany in 1980 was 22 per cent, 19 per cent in France, 41 per cent in the USA but only 11 per cent in Italy.

In terms of subjects studied, the DES says the UK produces graduates in a profile close to the average for all the countries considered. It points out too that comparisons are complicated by different coverages, for example, the high percentage of graduates of nursing and similar qualifications. The UK's rate is 5 per cent.

British satellite on physics mission

A British satellite was one of three due to be launched yesterday from Florida on a scientific mission to study space physics.

The joint British, German and American mission is designed to investigate the interaction of charged particles streaming off the sun - the solar "wind" - with the earth's magnetic field. Most of the particles coming from the sun are normally deflected, but the small fraction which penetrate our atmosphere eventually lose their energy in auroral lights.

The mission, known as AMPTE (Active Magnetospheric Particle Tracer Explorers), involves three

Leith faces demotion

Scotland's long awaited review of nautical education is to recommend that Leith Nautical College should no longer be a major centre for nautical studies.

The review, conducted jointly by the Scottish Education Department and the Convention of Scottish Local Authorities, has not yet been published, but is understood to recommend that nautical education in Scotland should be concentrated in Glasgow.

The report has still to be considered by ministers, and the three colleges involved - Leith Nautical College, Glasgow College of Nautical Studies and Aberdeen Technical College, will be given an opportunity to comment on the proposals. However, the government is known to accept the need to rationalize nautical studies, and is likely to accept the report's conclusions.

The report is thought to recommend Glasgow College of Nautical Studies as the key Scottish college on the grounds that shipping companies have shown support for it. Despite a general decline in student numbers, Glasgow's has held up, with a quarter of 1982's trainees coming from outside Strathclyde region.

Strathclyde Regional Council which runs the college, has warned in the past that if Glasgow's courses were cut, the college might have to be closed within two to three years.

If the review is accepted it could mean the loss at Leith Nautical College of 500 full time student places and 38 courses, with a further eight courses being axed at Aberdeen Technical College. The review is understood to advise that courses should be progressively phased out, beginning next month and with closures completed by June 1986.

Leith, which the government wishes to transfer to the control of Lothian Region next year, would continue to run courses in marine electronics, hazardous cargo handling, and instrumentation and control, the report suggests.

MSC tactic 'underhand'

The Association of Metropolitan Authorities accused the Manpower Services Commission this week of trying to inveigle chief education officers into cooperating with the White Paper *Training for Jobs*, by underhand means.

In a letter to Mr David Young, chairman of the MSC, Mrs Nicky Harrison, chairman of the AMA's education committee, says that several of their member local authorities have reported being approached by MSC regional officers. This was not for the purpose of just informing them of their indicative allocations, as agreed by MSC commissioners, but with the aim of negotiating over the White Paper.

"As you know, we are continuing our campaign against the White Paper. It would be quite underhand if MSC were to try now to subvert the unanimity of the English and Welsh local education authorities."

The AMA's education officer points out in a separate letter that local authorities are not actually being offered back the same amount of money as was deducted under the rate support grant. It says the MSC figures have been calculated to take account of extra district student numbers, so that net importers of students will be offered more than they lost.

British satellite on physics mission

A British satellite was one of three due to be launched yesterday from Florida on a scientific mission to study space physics.

The joint British, German and American mission is designed to investigate the interaction of charged particles streaming off the sun - the solar "wind" - with the earth's magnetic field. Most of the particles coming from the sun are normally deflected, but the small fraction which penetrate our atmosphere eventually lose their energy in auroral lights.

The mission, known as AMPTE (Active Magnetospheric Particle Tracer Explorers), involves three

US ahead on expenditure, says study

by Patricia Santinelli
Higher education expenditure in the UK is higher than in Japan and any other European countries, except the Netherlands, but only half the amount spent in the USA, according to a Department of Education and Science study.

The study, which compared the UK with six other countries in the Organization for Economic Cooperation and Development, France, Germany, Italy, Japan, the Netherlands and the USA, says that in 1980 we spent 1.2 per cent of our gross national product on higher education including student support. When this is deducted the figure is 0.9 per cent of the GNP.

On this basis, it would appear that the UK spends almost double the proportion of its GNP on higher education than France, Germany and Japan whose rates are respectively 0.7, 0.6 and 0.5 per cent. But the Netherlands, with a much smaller population, spends 2 per cent of its GNP and the USA 2.2 per cent.

The DES warns however that valid international comparisons are difficult to make because the way educational expenditure is allocated in the different sectors varies from country to country. For example, the figures for Germany and France are limited to expenditure by universities and the education ministries.

According to the study, the UK has the most generous arrangements for student support of any of the European countries considered, and is the only one to operate a system of grants which do not have to be repaid. Most other countries operate a mixed system of grants and loans while in Japan, student support is based entirely on loans.

The DES says that in 1979, the UK's average grant level of £1,000 per full time student was higher than any of the other countries. It was 28 times that of Italy, 11 times that of the USA, six times that of France and five times that of Germany.

In terms of new entrant participation rate to higher education, the DES says the UK has an estimated rate of 40 per cent if entrants to private establishments and correspondence courses are included. This compares with 35 per cent in Japan and 62 per cent in the USA where similar data have been incorporated.

But even excluding such data, the UK's participation rate at 31 per cent compares well with 25 per cent in Italy and 20 per cent in Germany and is relatively on par with that of France at 34 per cent.

However the participation rate of women in terms of the overall percentage of total enrolments is low both in the UK and Japan compared to the other countries considered. In the USA the participation rate was 51 per cent, in France 46 per cent and in Germany 41 per cent compared to the UK's 37 per cent and Japan's 34 per cent.

The UK's graduation rate from higher education is on par with that of France and Germany but about half the level found in the USA which includes graduations from private colleges. The rates for the UK and Germany in 1980 was 22 per cent, 19 per cent in France, 41 per cent in the USA but only 11 per cent in Italy.

In terms of subjects studied, the DES says the UK produces graduates in a profile close to the average for all the countries considered. It points out too that comparisons are complicated by different coverages, for example, the high percentage of graduates of nursing and similar qualifications. The UK's rate is 5 per cent.

British satellite on physics mission

A British satellite was one of three due to be launched yesterday from Florida on a scientific mission to study space physics.

The joint British, German and American mission is designed to investigate the interaction of charged particles streaming off the sun - the solar "wind" - with the earth's magnetic field. Most of the particles coming from the sun are normally deflected, but the small fraction which penetrate our atmosphere eventually lose their energy in auroral lights.

The mission, known as AMPTE (Active Magnetospheric Particle Tracer Explorers), involves three

The mission, known as AMPTE (Active Magnetospheric Particle Tracer Explorers), involves three

The mission, known as AMPTE (Active Magnetospheric Particle Tracer Explorers), involves three

DON'S DIARY

MONDAY

The house is occupied by the baby, the baby-minder and the cleaning lady, so I retreat to the university. Fortunately, some business has come up, largely to do with September re-sits. This gets me going on a happy little morning's work: filing, checking typing, hassling colleagues, followed by some reading and noting on the subject of corporatism, which I will have to tell the students about next year. Having formed opinions on the subject, I opt for lunch. Colleagues tell me that my opinions are highly orthodox: they do this to annoy me.

In the evening I take a colleague out to my enormous and very wild allotment and tell him which bits he can have. From there, down to my eldest son's school to talk to his teacher about the teachers to go for a drink with me and then she invites me back to her place. This might, in some circumstances, be enormously exciting, but her place is also my place.

TUESDAY

Give the university a miss today and spend the time running through the countryside, gardening, picking fruit and veg, feeding the tomatoes, attending the school play, shopping, pecking, criticizing the shopkeeper who sold me a duff lawn-mower, thinking of ways to kill the neighbour's cat, etc. The sort of truly useful day which can only be spent by a free man about to go on a journey. In the evening I explain to the boys that Daddy is going away for a while, that there are some things a man has to do...

WEDNESDAY

Here we go. Here we go. Here we go. The start of the annual University of Warwick Staff Cricket Club tour of Wales: the Don are on the move. After packing twice (failed in two bags, succeeded in three), the bus comes to collect me at 10 am and we make our way sedately towards the Welsh border under grey skies. When fully assembled the party will consist of six academics, two researchers, two university surveyors, a teacher, a businessman, a filmmaker, a sociologist's son and a licensed victualler's representative (henceforth LVR).

The skies clear over Wales, where it has not rained for many months. Our game is of 40 overs per side, starting at 3.30 pm against Llandudnod Wells. It isn't much of a game. We graft our way to 151 and then bowl the opposition out for 47. Our leg-spinner might be a monster from the planet Krypton so far as the batsmen are concerned: he takes seven wickets for 20 runs. I have a curious day: bat, but don't score any runs and am not out; bowl, but give away no runs and take no wickets. This is the first time I have achieved this double negative: cricket, always has something new to offer.

A long evening's drinking both at the pub and at the medieval shack where we lay our sleeping bags. After remembering all year what I like about the cricket tour, I always remember on the first day what I dislike about it. The cricket takes over completely and is no longer part of life, but the whole of it. The banter about performance thus seems closer to the bone than usual. As someone who can aspire to be a "bits and pieces" cricketer, as the commentators now call it, the difficulty for me is getting in to the game and my anxiety dream goes: Day 1, easy win, do not bat or bowl. Day 2, "rested". Day 3, rain.

THURSDAY

After an excellent breakfast, the party divides. There is plenty of time today, as the game is only a few miles

away in Brecon. Five of my generation choose to sit around the cottage, grumbling at the newspapers, but the majority of us head for the hills, for high altitude fielding practice, hurling a ball to each other as we climb through the bracken. At the top, there are acres of billberries which we pick and eat and a beautiful view over mid-Wales and the Beacons. A good game of cricket. We struggle along to 147, the rookie getting 55, and then bowl them out for 118. I am not playing today and spend most of the time unpinning in the baking heat, taking a lot of sick for not giving my own side a run-out decision. In the evening the party splits into two pubs for some reason. I end the day feeling rather miserable, perhaps because I haven't played, but also because I have a headache and miss the family and am stuck in a pub with a video machine which is amusing for a time...

FRIDAY

Down to Swansea. Today's schism is between swimmers and benchmen. I go with the beach set.

The game, against the University College staff, on their vast ground on the edge of the Gower, is fairly silly because they insist on a 40 overs limitation. We get 162, our usual sort of score, this time the sociologist's son earns the right to buy a jug of beer by scoring 54. But the opposition never look like getting them. Even when I come on, first change, there is no response and I end up taking 27 for 1 off 8 overs. My wicket is a freak, the opening bat deflecting the ball onto his stumps with his inside leg, from outside leg stump.

The evening is very sociable, not least because three of us and one of them are from the Burnley area. Bill Burnley, as we always call him, has a perfectly preserved accent. We drink a lot.

SATURDAY

This is the day we leave the cottage and I drive the LVR's Cavalier SR, shades on, sunroof off, medallion round neck, quadrophonic blaring out among the sun-drenched Welsh hills. Vivid, warm.

Cricket, incidentally, is an immensely frustrating game. Aberswstwy staff plod along to 100 in 2½ hours and then put on another 60 in next to no time, for the loss of very few wickets. I am annoyed not to bowl. OK, so we have plenty of good bowlers, but the period when they were becalmed in the seventies and eighties was just right for my (flight and guile) lobs.

I do get a bat, though, thrown in as an ennobler when we need more than 8 an over. I hit a couple, end up at the wrong end and am bowled by a ball which I would only ever have blocked; we fall a few runs short with nine wickets down. Match drawn, fair and square, an excellent advertisement for traditional cricket, because the result was in doubt until the last ball of the day.

Aber entertain us afterwards in their beautiful staff club, high above the sea.

SUNDAY

We arrive at Llanidloes in style. Chariots of Fire throbbing from the quadrophonic of the repobile. Just as we are getting changed, I see my car rolling across the grass, containing wife, three sons and a brother-in-law. Suddenly, the tour is a family affair.

Llanidloes make the same mistake as we made yesterday, keeping the bowling too fast and tight, taking few wickets, but confining us to 116 at tea, so that we bat on. A quick thrash takes us to 148 and we declare. In the field, I am reflecting that I have played only a tiny bit-part on this tour, when the skipper tosses me the ball. I would like to report that it all ended in drama and triumph with 50 for 5. But I work hard for a wicket, have a dolly dropped, and finally trap a batsman low trying to pull. All I achieve is respectability and keeping the game even: 8 overs, 21 for 1. Sometimes you're head, sometimes you're not. In the end, Llanidloes win a few runs with 9 down, just as we did at Aber. As we leave the field, my brother-in-law hands me a pint of lager, which tastes very good indeed.

Lincoln Allison

The author is a lecturer in Politics at the University of Warwick.

Aid policy to be reversed

by John O'Leary

British aid policy is to be partially reversed in order to build up the supply of expatriate personnel in universities and other key institutions in developing countries. Mr Timothy Raison, minister for overseas development, told an international vice chancellors conference last week.

Mr Raison told vice chancellors from 30 countries, meeting at Warwick University, that ministers had become increasingly concerned about serious weaknesses in management and technical expertise in many countries, particularly in sub-Saharan Africa. Scarce human and financial resources had not been used to best effect and development had been constrained.

He said he had decided to change the emphasis of aid programmes as a result, to give higher priority to manpower programmes. The education sector would be a major target for assistance, particularly in the Commonwealth countries of Eastern and Southern Africa and the Pacific.

Although the number of people supported under education programmes had fallen more sharply than in other areas, education had still accounted for 40 per cent of aid personnel in 1983. Mr Raison added that universities would attract a high priority because of their inability to cope with demand in science disciplines particularly.

The minister referred to discussions taking place under the aegis of the British Council, which organized the conference, on the desirability of changes to the format of the PhD to meet the requirements of other cultures and systems, as evidence of British willingness to welcome overseas students. The debate on the need for a move towards more taught PhDs is taking place in a committee chaired by Dr David Harrison, vice chancellor of Keele University.

Meanwhile, the vice chancellors were anxious to extend the practice of some universities in offering split PhDs, in which the student undertakes part of the course in his home country



A set of four stamps commemorating the 50th anniversary of the British Council will be issued on September 25. They depict the main spheres of activity by the council.

before coming to Britain. The qualification has been a prerequisite for a staff post in many universities in the developing world and is therefore subject to considerable demand.

Delegates to the conference, which was formerly run by the Inter-University Council, also discussed links with British universities and the promotion of distance education. Mr Jack

False start for Olympic visitor

The world's newest vice chancellor attended the conference, as much to his surprise as the organisers'.

Four days before the conference started, the Hon. Bishop Tlase, Lesotho's minister of education, culture and sport, was making a hasty departure from Cyprus, where he had been attending the Commonwealth education ministers' meeting, en route for the Olympic Games.

Butterworth, vice chancellor of Warwick University, who chaired the conference, said there was evidence of change back to giving priority to education in developing nations, which those countries which have been served by the IUC had been busy together with representatives of universities in other continents.

Hardly had he arrived when he was notified of his appointment as vice chancellor of the National University of Lesotho and ordered to leave Warwick University.

Although disappointed at missing the games, he was by no means put at switching posts since the vice chancellorship carries equal status in his ministerial office.

Watchdog for adult colleges

Quality, dependability and durability are keywords in the marketing strategy of a new organization in adult education. This month the Adult Residential Colleges Association is reviewing its 4th year of operation and planning for the next 12 months.

Already the ARCA represents 25 of Britain's 40 adult residential colleges, which are mainly local education authority sponsored, and offer short courses ranging from two-day to week-long programmes.

The association was established as a response by the residential colleges to the growing commercial interest in educational holidays, and also to boost income in the wake of local authority cuts on spending.

It aims to become recognized as a consumer watchdog, ensuring the high educational standard of short courses is maintained, according to Mr Allan Kingsbury, principal of Burton Manor College in Cheshire, and its current chairman.

But its major task will be to publicize the courses and facilities offered by the colleges.

The first venture will be the publication this autumn of a 16-page supplement to a holiday magazine distributed nationally through stationers. Later the association hopes to use television advertising to promote the colleges.

The association is intent on forging strong links with the British Tourist Authority and encouraging overseas interest in the colleges through the British Council.

Details of winter courses at all the residential colleges are contained in the programme published by the National Institute of Adult Continuing Education this month.

Residential Short Courses Winter 1984-85, published by NIACE, 19B De Montfort Street, Leicester, LE1 7GE. Price 90p (including post and packing).



"Phil and John" caught enjoying a quiet nap by Maddy Naylor, an honours fine art student from Loughborough College of Art and Design, one of the eight finalists in the Hunting student art competition. She now stands to win one of two £5,000 prizes in the company's national art competition which takes place next January.

After the ball was over...

Oxford University colleges may in future have to deposit £10,000 with the city council as insurance against intolerable noise levels during summer balls, if a proposal by city councillor David Whitfield is accepted in September.

The council is determined to take more stringent measures against colleges in an attempt to stop disturbances during colleges' annual festivities.

The latest proposal is a radical response to this year's controversial Worcester College ball, when noise from music and fireworks kept Oxford residents awake across a three mile radius throughout the night.

A noise abatement order had been imposed by the environmental health

officer, Mr Stan Garrod, and the college now faces prosecution and a possible £2,000 fine.

Councillor Whitfield said: "Most colleges do keep noise levels within limits. Some, however, go far beyond what could be reasonably tolerated."

In support of his deposit proposal he said: "I don't think a five-figure sum would be too much. The deposit would be returned in whole or in part, depending on the level of disturbance."

But Alan Griffiths, an Oxford law don and local city councillor, has expressed scepticism about the viability of the proposal, claiming that it has no clear legal basis, and is unlikely to be passed by the council.

Lords make call for two-year training

by Patricia Santinelli

The Government was urged this week by the House of Lords Select Committee on the European Communities to introduce a two-year training scheme and give all young people common status and allowances, if it wanted to improve its workforce and remain in the EEC.

The House of Lords EEC committee says in its report *Youth Training in the EEC* that these are two key elements in a strategy to radically restructure education and vocational training and stop the UK lagging behind other countries.

"There is evidence that the UK's workforce is significantly less well trained than that of France and Germany," it says. "For example in Germany only one third of the workforce is vocationally unqualified compared to the UK's two thirds. The EEC cannot afford to carry member states unwilling to improve their performance, if it is to compete successfully with Japan and the USA."

The committee, chaired by Lord Seebohm, took evidence over nine months from almost every EEC country, some UK Government depart-

ments, as well as interested organizations and individuals.

The committee is adamant that what the UK needs is a straightforward system which everyone understands and benefits from and which will help young people make sound choices on education, training and employment.

It sees the introduction of a post-16 Youth Training Scheme year as vital if the opportunity to build upon foundation training is not to be wasted. It points out that the lack of a guarantee to continue with off-the-job training is regarded as a major weakness in current UK vocational training policy. It adds that there is an urgent need to design training modules which can be taken after the first basic year.

The committee's recommendation for a common status and allowance would apply to all 16-19 year-olds whether in education or training. It admits privately that this would be above the YTS level, to ensure a degree of financial independence.

It also recommends that all young people should be granted a certificate listing their achievements, however modest, and it wants careers guidance up to the age of 24 to be improved.

Legal test set for recognition claim

A crucial legal test of the Association of Polytechnic Teachers' claim for recognition by local education authorities is scheduled for a hearing early next month.

Cleveland County Council is challenging a ruling by an industrial tribunal that the non-TUC union's safety representatives at Teesside Polytechnic should be given time off to fulfil their duties.

After failing to win a review revision and revocation of the tribunal's decision Cleveland lodged its appeal with the Employment Appeals Tribunal.

The APT regarded last September's decision in its favour as a major breakthrough - but legal uncertainty has meant that the expected series of local recognition agreements has yet to materialize.

Its five health and safety representatives at Teesside have not been allowed time off in the intervening 11 months. One plank of the tribunal's decision was that irrespective of the views expressed by Cleveland, the APT has enjoyed *de facto* recognition since it was awarded a seat on the Burnham further education committee on December 23, 1981.

New system solves low pay problem at a stroke

by David Jobbins

Teething troubles with a new computerized payroll system at Kent University temporarily solved one estate worker's low pay problem.

Instead of an expected £80-plus, his pay slip showed an astonishing £1,000 wage for a week. Other weekly-paid employees found they had paid no tax at all or had paid it twice over while monthly-paid staff suffered delays in receiving notification of their pay.

Problems arose because of "dirty lines" between the university's computer and the one operated by Centre-File, the National Westminster Bank subsidiary which has taken over the payroll function.

The university said that any new system was bound to suffer teething problems and that any which had come to light had been rectified. It could not say whether figures suggested for over-payments were correct.

Headaches associated with the introduction of the new system have led to extra workloads for the university's pay office. Staff have been coming in early and working through lunch hours and into the evening to sort out the problem.

Ms Chris King, branch secretary of the university's National and Local Government Officers' Association branch said: "It is always fraught in the pay office because of meeting the deadlines for people's pay cheques but this has really brought things to a head. The staff are more or less killing themselves - we have had two women upset to the point of tears at the thought of returning to work after the weekend."

Nalogo is deeply concerned at the potential for harming out tasks now performed in-house and largely by its



Members to agencies such as Centre-File.

The firm's assistant controller, Mr D. M. Stranack, said that its services were far more extensive than payroll and personnel functions already disclosed. "Systems have been installed at the University of Wales Institute of Science and Technology, Goldsmiths' College in London and the University of Kent all based on minicomputers with several visual display units and handling such applications as student records, examination processing, student registration, accounting, fee collection, personnel, payroll, word processing, University Statistical Record returns and automatic links to the Universities Central Council on Admissions," he said.

Students queue up for new OU course

More than 250 people have applied for the 40 places on the Open University's first taught MA in literature.

The course, which begins next year, is a pilot venture. If it succeeds, the university plans a long-term presentation.

Students will pay the full £800 cost of the course - by instalments if preferred. Applicants will be expected to possess a first or upper second class honours degree and also have access to suitable library facilities, preferably in a university.

The MA in literature will be divided into study blocks with a set syllabus.

'Middle class' assumption challenged

by Brian Morton

The assumption that higher education is the preserve of the middle classes has been challenged by Dr Ernest Rudd, reader in sociology at the University of Essex.

Writing in the quarterly journal *Higher Education Review*, Dr Rudd makes the general point that middle class people value education highly, are leaving school barely literate or numerate, then the fact that few go to university is of a lower order of priority. Equally, the assumption of a middle class social profile in education is both patronizing and unsubstantiated. There is every possibility that the termination of full time education at 16 is a carefully worked out decision based on full information and consideration rather than ignorance and diffidence.

At the other end of the spectrum, Dr Rudd points out, is a dangerous misleading prejudice that working class people value education very lowly. While this may be true of certain parts of the country, in other areas - notably Wales and the North - education represents a central and crucial facet of family and community life.

Dr Rudd points to the deficiencies of the available statistics: either too few studies of social mobility or else annual statistics issued by UCCA based on a misleadingly simple application form question about parental occupation.

The figures rarely make sufficient distinction between school-leavers and those who have engaged in employment before seeking entry into higher education, he says.

In defence of any major restructuring of entry criteria, what is needed, Dr Rudd argues, is a reliable and valid means of recording social data, a way of correcting inaccurate assumptions and as a basis for policy development.

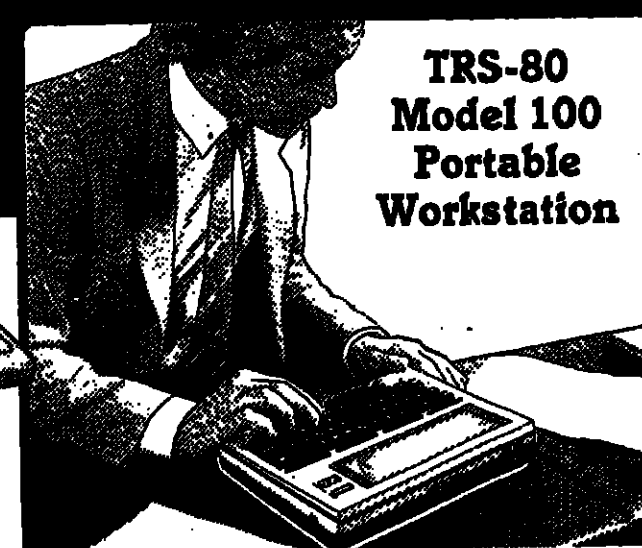
Whose Children Go to University? by Ernest Rudd, Higher Education Review, Summer 1984, available from Tyrrell Burgess Associates, 24 Sandpiperlands, Croydon CR0 5DB.

The "Powerful and the Portable" from the TRS-80 Microcomputer Range!



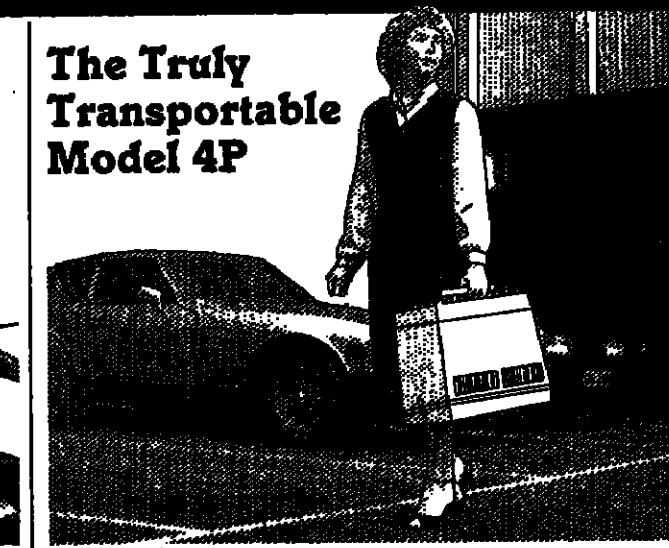
Powerful Ultra-Performance Tandy Model 2000

Among the features:
■ MS-DOS 2.0 With BASIC ■ Microsoft Software
■ Intel 80186 Processor (8 MHz)
■ RAM, Up To 768K With Parity ■ Twin Disk Drives
■ Hi-Resolution Colour Graphics (640 by 400)
■ Internal 10 Meg. Hard Disk Option



TRS-80 Model 100 Portable Workstation

Among the features:
■ Full Size Typewriter Keyboard ■ Weighs Under 4 Lbs
■ 8-Line By 40 Character LCD Display
■ Five Built-In Executive Management Programs
■ Communications Workstation ■ Expandable To 32K



The Truly Transportable Model 4P

Among the features:
■ Powerful 64K RAM, Expandable to 128K
■ 9" High Resolution Display ■ Dual Disk Drives
■ Parallel Printer Interface ■ Weighs Only 26 Lbs
■ Totally Compatible With All Model 4 Disk Programs

TALK TO TANDY TODAY

Don't forget, talk to Tandy - the answer to all your microcomputing questions or problems, about these, and all other Tandy systems, sales, training and service are just a phone call away! See Yellow Pages For Address Of Store Nearest You.

TEAM A Service From

The Education Department of Tandy Corporation in the U.K. Tameaway Tower, Bridge Street, Walsall, West Midlands, WS1 1LA. Tel: 0922-648181

Send For Further Information To:

Special Marketing, Tandy Corporation (Branch UK), Tameaway Tower, Bridge Street, Walsall, West Midlands, WS1 1LA.
Name _____
Address _____
Post Code _____
Tel. No. _____ (TMS90)

Scottish merger moves put on ice

by Olga Wojtas
Scottish Correspondent

Scotland's new tertiary review body will not be looking at merger proposals in Aberdeen or between Stirling University and Paisley College of Technology.

This will effectively freeze any moves between institutions for at least another year, since the Scottish Education Department is highly unlikely to consider such far-reaching proposals until the new Scottish Tertiary Education Advisory Council has completed its report.

Paisley and Stirling began merger talks almost two years ago and it is 18 months since Aberdeen University's court proposed an independent inquiry into a merger between the university, Robert Gordon's Institute of Technology and Aberdeen College of Education.

The Secretary of State for Scotland told Aberdeen University's principal that it would be inappropriate to set up an inquiry, since the STEAC would be reviewing the relationships between institutions.

However, following the STEAC's first meeting, Mr Donald McCallum, its chairman, said the council would not be considering specific issues but would produce "broad principles which should govern tertiary education over quite a future span".

The council would certainly not be making a direct recommendation on the Aberdeen merger or similar issues, said Mr McCallum, but the solution to these issues should be rather clearer following the council's report.

This is not likely to pacify Aberdeen which has argued the need for merger on the grounds of its particular geographical position. Its catchment area of the north of Scotland has too small a population to support three degree-awarding institutions, it has claimed.

However, Mr McCallum said the STEAC would be considering how

best to fund the Scottish universities, reviving speculation that they may eventually be funded through the Scottish Office and not the Department of Education and Science.

The chairman of the University Grants Committee, Sir Peter Swinerton-Dyer, attended the STEAC's first meeting in place of Professor D. G. Gowenlock of Heriot-Watt University, who will be the STEAC's official observer. Mr McCallum said Sir Peter's presence showed that the UGC saw STEAC's work as having considerable impact and interest.

He fielded criticism that the nine-strong council had only four educational members and no trade union or further education representation by saying that the STEAC's membership had been drawn up by the Scottish Secretary.

He stressed that the trade union movement would be among bodies asked to make submissions to the council. The STEAC intended to ask for specific comments on a number of issues, with submissions to be received by the end of October.

He did not agree that this gave bodies insufficient time to reply since a number of organizations had been anticipating this situation. "The STEAC itself hoped to produce its report by the end of June, which meant working 'fairly hard and fairly quickly'."

One of the most important issues for the STEAC to consider was the projection of demand for places in higher education in Scotland over the next 20 years or so and its implication for the higher education system. There were changes in birthrate to be dealt with, students had changing needs from tertiary education and there was more demand from mature students.

Having looked at the demands likely to be made, the STEAC would have to examine the roles of the different sectors of higher education in meeting them.

Hague backs a positive winner

by Paul Flather

"Someone is always first. Someone is always best. There is always a winner." So says the front of a glossy brochure advertising a five-day "growth opportunity" in strategic leadership organized by the Oxford Strategy Unit under the direction of Sir Douglas Hague.

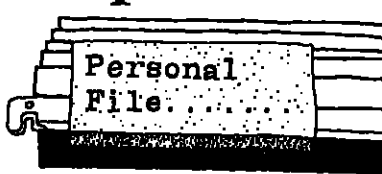
Sir Douglas of course is better known as chairman of the Economic and Social Research Council and a former adviser to the Prime Minister's policy unit. But during his one day a week off he is still actively pursuing his personal goal to glimmer up the country's business and management leadership.

Now he is about to go freelance - something he believes may soon become a norm among professional people - offering his own set of courses to "identify and develop the leadership potential that already exists within companies" at around £2,000 for the five days.

Training on offer from Hague and a team that includes Norman Strauss, a former adviser to Mrs Thatcher, Meredith Belbin, a top industrial psychologist, and Michael McCarthy, a managing director of the engineering giant GKN includes team leadership and membership skills; the operation of grand strategy; key factors for organizing growth and innovation; plus syndicate discussion and personal counselling.

Sir Douglas began what amounts to a personal crusade to boost management education more than 20 years ago, setting up a business studies department at Sheffield University while a professor there, and taking the applied economics chair at Manchester University before moving to the MBS.

A glance through his *Who's Who* entry confirms his long-standing involvement through such committees as the National Advisory Council working party on education for industry and commerce (1962/63) and the Treasury's working party on civil



Hague: management "a key issue"

As Sir Douglas puts it: "A lot of people believe leadership is just a matter for individuals. They learn that leaders cannot be isolated from their team and that real leadership may not be the traditional chairman, but the person who gets things done."

He has refined his techniques over the years, particularly through his links with the Manchester Business School and the Oxford Centre for Management Studies. Though never one to flight shy of saying what he believes, he has just made some sharp criticisms about the way the centre is being directed.

Sir Douglas began what amounts to a personal crusade to boost management education more than 20 years ago, setting up a business studies department at Sheffield University while a professor there, and taking the applied economics chair at Manchester University before moving to the MBS.

A glance through his *Who's Who* entry confirms his long-standing involvement through such committees as the National Advisory Council working party on education for industry and commerce (1962/63) and the Treasury's working party on civil



Poly takes unusual step

Extemporaneous Dance Theatre is to take up residency at Brighton Polytechnic for a month next year in what is believed to be the first scheme of its kind.

Extemporaneous is a London-based

contemporary dance company which tours extensively throughout Britain. The Brighton residency, at the school of human movement studies at Eastbourne, will be funded mainly by the Arts Council.

OU abandons bid to oust hangers-on

by Felicity Jones

The financial restraints and rising staff shortages being experienced by the Open University have led to an attempt to abandon the deregulation procedure introduced this year.

The pressure on staff in hand-picked regional offices like West Midlands has built up to attempts to abandon the procedure, which prevents people from remaining on the courses.

The university's student progress committee voted to suspend the procedure as the safeguards involved, in the form of advance warning, enabled students to voluntarily deregulate year and reapply the following year, thus avoiding expulsion.

Although this was referred back to the committee by the academic body, the matter is unlikely to end there. It will, however, mean that the procedure will continue for the coming academic year.

There remains a strong body of opinion which would like to see the elaborate procedure shelved for good even though it took 11 years to formulate.

Mr Roger Mills, director of the London region, was one of those who admitted that it had proved a time-consuming practice for tutor consultations.

He said: "Personally, in a time of financial restraint I think it is more important to concentrate time and advice on those coming new into the university than on those minority who remain indefinitely within it."

But he admitted that it was unfair for those students to be placed with other students could use.

The student progress committee is now expected to reconsider its decision on the grounds that one year has not been long enough to judge the success of the procedure and because it is considered that some student check system is still required.

Road to a degree

Jaguar Cars is sponsoring a part-time engineering degree at Coventry (Leamington) Polytechnic.

The modular degree will be taught in the evenings and on Saturday mornings and is open to engineers, technicians and other staff working in the company. It will also be available to students at the Leamington Polytechnic.

The question was raised with Mr Peter Brooke, under-secretary for higher education, by the British Refugee Council last November.

CNAA shakeup set to begin

by Karen Gold

The year-long reorganization of the Council for National Academic Awards is to begin this autumn, with the main effects to be felt in polytechnics and college in the 1985/86 academic year.

From this autumn the council's two most important committees, one for academic policy and the other for institutional policy, are to be merged into one: a committee for academic and institutional policy.

That committee will have a special sub-committee to streamline council visits to institutions: the first obvious by-product of the Linton Committee's investigation of validation procedures in the CNAA. The new sub-committee, to be chaired by Thames Polytechnic director Dr Norbert Singer, will be charged with reducing, ordering and coordinating visits as

much as possible, so institutions are no longer faced with unrelated CNAA visits throughout the year. To be called the review coordinating committee, it will begin work in the autumn term.

The following year, the existing CNAA subject committees will increase from five to around eight. Proposals for the division will go before the council at its December meeting. They follow a review by each committee of its own activities.

The proposed changes are: the arts and social studies committee to divide into two, one for arts and humanities, the other (perhaps to be more tactfully named) for social sciences; the science and technology committee to divide into three, for science, engineering and the built environment.

In addition there might be a health, leisure and paramedical studies committee taking work from a number of the existing ones, although the council

will have to decide whether the possible expansion in these fields justifies a free-standing committee.

The committee for education is also considering dividing into two to cover initial and in-service training separately.

There are two reasons for the changes. Committee members feel they have become detached from grassroots validation with the increasing numbers of courses and institutions served by the CNAA. There is also dissatisfaction with the work of some CNAA boards and panels which do the bulk of the visiting, because major institutions in particular see them as sometimes inconsistent or of lower quality than the core team whose work they are validating. The numbers of boards and panels will be reduced in this exercise, and their subjects redistributed with the changes in committees.

Academic policies, page 14

The accent is on the spoken word

by Paul Flather

Further research on the most common English dialects is needed to help teachers decide whether youngsters are making grammatical mistakes or using traditional English, according to a new report.

The authors of the report on the grammar of English dialect, prepared for the education and human development committee of the Economic and Social Research Council, recommend the creation of a new British forum for research into "dialectology", perhaps a university centre or unit.

They claim that interest in dialects is growing among both academic linguists and local people and list almost 30 works, many of them popular books, produced after concern that regional speech variations were disappearing and needed to be studied and preserved.

They stress the educational importance of such studies, given that less than 5 per cent of the British population speak with "perceived pronunciation", yet the educational system is based on standard English with dialects considered bad, sloppy or dull in the classroom.

Some academics now feel there may have been an over-concentration in schools on middle-class standard language, says the report prepared by Professor Peter Trudgill, professor of linguistics at Birmingham University, aided by two researchers.

Scotland and Yorkshire appear to have relatively well documented, while dialects in the west Midlands, the north-west, East Anglia and Wales have received little or no attention. Also there has been great emphasis on phonological studies for example of cockney, but little work done on the grammar of dialects.

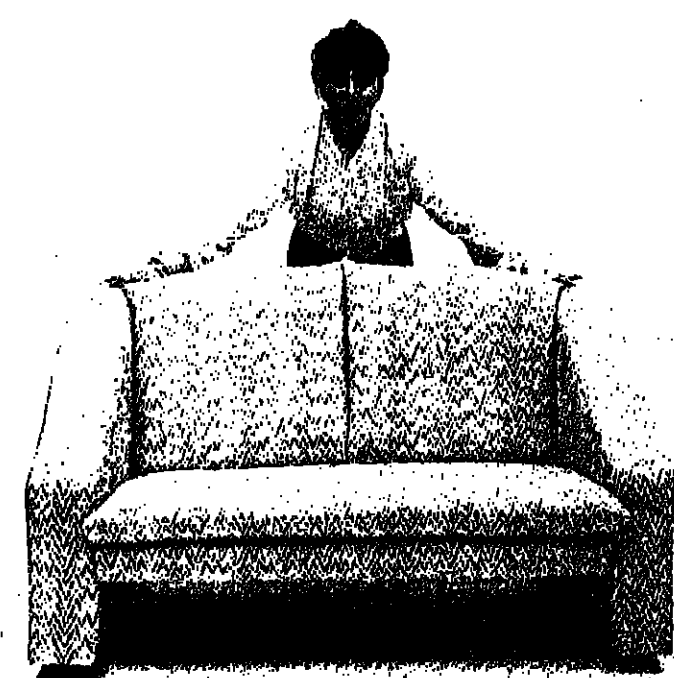
The authors suggest further research on topics such as the use of conditional forms (If I had've gone), the use of pronouns (Him and we saw her), and "have" (You do it, do you? You done it, did you?).

Further research could well reveal an entirely different relationship between dialect and standard English than traditionally held, say the authors. They also show that the diversity of dialects is being reduced, and replaced by a new "levelled standard dialect", not standard English.

The report notes existing research at Leeds University, where work on dialects has been continuing for 25 years at Newcastle University, and at the Higher Education Research Unit at Birmingham University, and Wales Polytechnic.

Dialectology appeared to date from 1870 when A. J. Ellis began his research could in future be published in booklets for teachers to use, says the report. It also calls for a regular research register.

The *Grammar of English Dialects* by V. K. Edwards, P. Trudgill, and B. Womersley, £3.50 from School Government Publishing Company, Darby House, Ditchingley Road, Mersham, Redhill, Surrey.



Leicester Polytechnic student Christine Haddon poses with the sofa which has won her an expenses-paid visit to next year's Paris International Furniture Fair. Both she and her course colleague Peter Brook were among the five finalists in the Young Furniture Designer of the Year competition.

Picking up on inventions

Manchester University is developing an introductory course in intellectual property for managers and research workers, sponsored by the Department of Education and Science's PICKUP programme.

The course will be attended by university researchers as well as industrial employees and will begin this October. The material written for it will be published for other institutions.

The first nine-day course will give a basic grounding in patent law and procedures for protecting inventions. It will help institutions which are planning how to secure benefits from new research after the British Technology Group's rights of first refusal on exploitation of publicly-funded research are finally rescinded, probably later this year.

A Government Green Paper on patents earlier this year suggested that universities were not well-prepared to protect their ideas - seen as a vital first

step to successful exploitation. Mr Keith Hodgkinson, a law lecturer at Manchester who is researching material for the course, said university research departments often didn't know the problem existed.

"We're not going to turn anyone into a do-it-yourself patent agent in a nine day course," he said. But he hoped the course would teach people when to seek professional advice on intellectual property rights and what preliminary steps to take to avoid losing the chance to patent.

The course is being organized by the law department at Manchester, with the university research consultancy service, the Licensing Executives Society and the Chartered Institute of Patent Agents. The course material will be revised after the first run-through this autumn and written into a report for the DES next year. A similar course to update the knowledge of lawyers and patent agents will also be part of the project.

Newbattle inherits a dispute

Scotland's only higher education college for mature students, which attracts sponsorship from a number of trade unions, has put a ban on the local aristocracy.

The Marquess of Lothian, whose father gave Newbattle Abbey College, the former family home, to the nation, is laying claim to paintings hanging in the college.

But Newbattle Abbey (motto: "late but in earnest") maintains the paintings belong to the college. The college principal, Mr Alex Reid, is understood to have written to the college governors, telling them that the college is prohibiting Lord Lothian or any of his representatives from entering the college while the matter of ownership is in dispute.

Lord Lothian is seeking the return of

some 14 paintings on the grounds that they are his own property on loan to the college through the conditions of the late Marquess's will. He is not thought to be claiming the return of a larger collection of 90 paintings which come under different conditions of the will.

However, one of Newbattle's governors, Councillor Peter Boys, said that legal advice taken some time ago indicated that under the terms of the late Lord Lothian's will, the contents of the college remained its property unless it ceased to be used as a college, or its contents were not respected or appreciated.

It is thought there is likely to be an emergency meeting of the board of governors in the near future to discuss the paintings' ownership.

Training families 'an occupational hazard'

by Patricia Santinelli

The whole basis of programmes in the Youth Training Scheme is put into question by a draft report which attacks occupational training facilities as potentially harmful and as not offering broad-based training.

The report, *Origins and Implications of Occupational Training Families*, by Dr Ron Johnson, an independent consultant and a former head of the Manpower Services Commission training services division, was commissioned by the Further Education Unit.

It is based on an assessment of a report, *Training For Skills Ownership*, produced by a team of the Sussex University-based Institute of Manpower Studies and published last summer by the MSC. The paper sent 11 OTFs as an alternative to narrow training and has since been used unofficially for preparing programmes in the YTS.

The report, which is likely to be published by the FEU with only a few minor alterations, is timely as the MSC is currently deciding whether OTFs should be adopted officially for future YTS programmes.

The report's main criticism is that OTFs do not allow young people to progress to careers of their choice and do not come to grips with job competence and that the discussion about education-led and work-driven is a web of half truths and innuendoes.

The report states that the use of a driving test as an example of performing a task in a real situation is erroneous, since this is an artificial situation and much learning has had to take place in advance.

"In other words the existence of

these listings is potentially harmful and they imply a diminution of the young person's choice," the report says. "These families were not chosen with regard to whether they were the ones which young people might want to move to."

The eleven OTFs are: administrative, clerical and office services; agriculture, horticulture, forestry and fisheries; craft and design; installation, maintenance and repair; technical and scientific; manufacturing and assembly; processing; food preparation and service; personal services and sales; community and health services; transport services.

The report argues against the IMS assumption that young people can basically transfer the skills learnt under one OTF only to another job in the same family, and that it would be impossible to transfer these skills across to a different family.

"If the same tasks are performed in two jobs which are in different OTFs there some mystical difference between the way the tasks are done because the key purpose of the job differs?" the report asks.

It adds too that the particular listings into OTFs have little to offer in providing trainees with the ability to do a real job. It says the TSO report does not come to grips with job competence and that the discussion about education-led and work-driven is a web of half truths and innuendoes.

The report states that the use of a driving test as an example of performing a task in a real situation is erroneous, since this is an artificial situation and much learning has had to take place in advance.

Dental school will not be closed

Edinburgh University has rejected the possibility of closing its dental school. And both the university and Lothian Health Board have agreed that new premises for the dental school and hospital are vital.

Plans for new buildings have been blocked for the past four years, firstly by public financial restraints and then by the report of the dental strategy review which last year said the output of dentists should be reduced by 10 per cent.

Following the dental review, the University Grants Committee asked Edinburgh to consider either closing the school or reducing its intake by a third. Edinburgh has already voluntarily limited its notional annual intake of 60 to 55 because of overcrowding in the nineteenth-century building.

A joint working party of the university and Lothian Health Board has proposed accepting the option of an undergraduate intake of 40 with an expansion of postgraduate courses, including refresher vocational training.

This has now been endorsed by Edinburgh's court, and the health board's planning and resources committee, and it is likely further talks will now be held with the UGC and the Scottish Home and Health Department on the possibility of new buildings.

Ms Agnes Lewis, one of the centre's



Lord Lothian laying claim

Skillcentre to reopen after reprieve

A Woolwich-based skillcentre deserted by the Manpower Services Commission was saved this week after the Greater London Council's Greater London Training Board agreed to support it at a cost of some £2.6m.

The centre, which is to reopen as the Charlton Training Consortium by the scrapping of a training project on by the people for the people - this autumn, has been the focus of a campaign since 1982. When this failed local organizations sought GLC funding to run their own training on the site.

Mr Gareth Daniel, chairman of the GLTB, said that he was very pleased to have been able to provide the funds to re-open Charlton, which provided a practical example of the theories they had been expounding.

"The way in which the MSC deserted the centre, simply because they had built a new one, miles away in Deptford, was criminal. Deptford is very difficult to get to for many of the local people who are using Charlton," he said.

The centre is to offer 300 training places aimed at all age groups, and at achieving a balance of women, ethnic minorities and disabled people. All courses will start with racism and disability awareness training.

Its main emphasis will be to ensure that those people who often do not hear about training opportunities are made aware of the consortium's existence.

The centre has adopted a democratic management procedure, whereby it became a limited company of 200 members who elected a board of 26 to form a management committee.

In addition, the centre will provide a 30 place creche with back up childcare facilities in the community and disabled unit, in which disabled people from an agency will run the administration.

Australians plan 'day of outrage'

from Geoff Maslen

MELBOURNE

Australian academics are planning a "national day of outrage" to protest at federal government actions affecting higher education.

Unions representing 18,000 academics in universities and colleges of advanced education have already begun campaigns against the government's spending guidelines for the next three years. The guidelines, which specify the government's spending priorities on higher education were released last month and provided for markedly less expenditure than that recommended by the Tertiary Education Commission.

The Federation of College Academics hopes to mount an A\$150,000 publicity campaign to put its case for more money for higher education in the forthcoming federal elections. The executive of the federation has already called for the national day of outrage and the imposition of selective industrial bans.

According to a spokesman for the federation, the bans could take the form of academics withholding examination results, refusing to teach in standard accommodation, and not teaching more than a specified number of hours a week.

At its annual general meeting this month, the Federation of Australian University Staff Associations will debate a motion calling for the federal minister for education, Senator Susan Ryan, to be removed from office.

Although Senator Ryan's proposed spending increases on higher education are the first of any significance for seven years, such were the expectations raised by Labour's pre-election rhetoric that university and college staff were profoundly disappointed.

Both college and university academics are particularly bitter at the government's intervention in a salary case won by academics. The government recently persuaded the academic salaries tribunal that it should agree to phase in a 5 per cent salary rise over the next 12 months, instead of adopting it in one go.

University and college staff associations have lodged an appeal with the federal court over the tribunal's decision following a national stoppage by college academics in protest. In the first action of its kind by CAE staff, more than 2,000 academics held protest meetings around the country.

A spokesman for the Universities' Staff Associations said academics had suffered a salary cut because the government had argued it was necessary to finance growth in the higher education sector. In fact, the "growth"



Senator Ryan: surprised

would take place in enrolments but would be scarcely noticeable in funds, the spokesman said. There had in reality been no offset of the salaries against higher education spending.

The spokesman pointed out that the government had slashed recommendations by its advisory body (the Tertiary Education Commission) by some A\$90m. It had also drastically reduced the recommended growth in student load - from 23,000 additional student places to a mere 15,000 over the 1984/85 period.

At the same time, the government had maintained its expectation that universities and CAEs would develop substantial programmes to increase opportunities for non-traditional groups to enter higher education - even though such schemes needed extra staff, facilities and money.

University vice chancellors have also voiced their concern about the guidelines. The head of the University of Sydney, Professor John Ward, called on the government to clarify its position on university standards.

"Given the government's financial problems and the low priority that the cabinet apparently gives to university education, it would not be surprising if universities were told to manage with less so that more could be given to the other sectors of tertiary education," Professor Ward told his staff. "There is little evidence that the government is resisting the temptation to do this."

The intensity of academic criticism of the guidelines and the kinds of protest actions proposed are known to have surprised and disappointed Senator Ryan. Adopting a line reminiscent of her conservative predecessor, Senator Baume, she has argued that higher education should be grateful for what it has been given and that it is capable of coping with what it has.

Trouble flares in Assam

from A. S. Abraham

BOMBAY

Gauhati University in Assam in north-eastern India may be taken over by the provincial government as part of Mrs Gandhi's attempt to snuff out a renewed agitation for the expulsion of "foreigners" (mostly Bangladeshi Muslim immigrants) from the state by the All-Assam Students' Union (AASU).

The protest has been going on for several years and, after a long period of quiescence, is reviving. Its immediate target is the Congress-I (I for Indira) government in Assam which was elected after an AASU boycott of the poll and so is considered to be unrepresentative. Beyond that, the aim is to have illegal immigrants, who threaten to overwhelm the Assamese Hindu majority, identified and deported or settled elsewhere in India.

The AASU is based in Gauhati University where its president is a postgraduate law student.

When he was asked at a recent press conference whether his government was thinking of taking over Gauhati University, Mr Sarika would only say that the university's autonomy could no longer be taken for granted.

New animal guidelines criticized

from Peter David

WASHINGTON
Tough new guidelines on the use of animals in research, unveiled in April by America's National Institutes of Health, have unleashed a barrage of angry criticism from universities throughout the United States. A 14-week consultation period ended last month with many universities complaining that the proposed guidelines will impose unnecessary administrative and financial burdens.

In one of the most outspoken responses, the Washington University School of Medicine has accused the NIH of proposing excessively stringent regulations in a vain attempt to pacify animal welfare groups whose final objective was to bring a complete end to the use of animals in research.

"We believe that the proposed changes are unnecessarily burdensome to our institutions, serve as an impediment to basic and clinical research and will increase significantly the costs of that research," the letter adds. The university wants mice and rats excluded from the new rules, and says a requirement to include lay members of the public on campus animal research committees would be "costly and difficult."

The NIH, which funds most biomedical research at American universities, issued the draft regulations in response to growing public concern about the welfare of laboratory animals.

Turkish academic faces sack over her headscarf

from Bernard Kennedy

ANKARA

A cause célèbre with a difference, a striking example of the cold war between Islam and laicism which persists in modern Turkey and an important test of the attitude of the university and political authorities in a country just emerging from a period of military rule - that is the case of Dr Nebahat Koru.

During the last month, the name of Dr Koru has suddenly been brought to the attention of millions of Turks. Not on account of her work in the chemical engineering faculty of Izmir University, but because she persists in wearing a headscarf while she goes about it.

According to the rules and regulations drawn up after the establishment of a secular republic in Turkey in the 1920s and reiterated ever since, it is illegal for any civil servant, teacher or student to wear a headscarf at work. To do so is seen as bringing religion into the affairs of the state.

Dr Koru's troubles started long before she became a public figure. First she was warned and subsequently disciplined by the dean of faculty. Then she had a portion of her wages

deducted. Most recently, the rector of the Aegean University, Professor Sermet Akgün, has ordered that she should not be considered for promotion to the rank of assistant professor.

However, Dr Koru, who studied in Boston for two years before starting her university career in Turkey, remains adamant. "I have been teaching at the university for 10 years and have not removed my headscarf since," according to article 3 of the constitution, everybody has the freedom of religion and conscience.

The Higher Education Council recently suggested the turban as an alternative form of headgear for religious female students and lecturers. The turban covers the hair, as required by Islamic tradition, but cannot be construed as a form of religious propaganda. No doubt Rector Akgün would be more than pleased if Dr Koru adopted the turban. As it is, she has no intention of so doing.

The signs are that Dr Koru will be removed from her post, but for the moment, the rector is stalling pending a court decision on Dr Koru's appeal against being refused promotion.

University closed after Israeli raid

from Benny Morris

JERUSALEM

The Israeli military government in occupied West Bank has closed down Al-Najah University in Nablus for two months following a raid by Israeli security forces in which tens of thousands of documents were seized.

The AAU, which represents the 50 leading research universities in the United States, is one of many higher education organizations to have expressed alarm over recent years about the health of the government research system. The principle that government research funds should be shared out on the basis of scientific merit rather than political influence.

Although Congress has yet to decide on the fate of Georgetown's request, the university was plunged into new embarrassment this month when the presidents of two universities denied Georgetown's claim that they were partners in the controversial fuel project.

In a press release last June defending its request to Congress, Georgetown said the University of Texas and

Poland to establish new university

The Polish government has placed before the Sejm (parliament) two bills, one establishing a university in Szczecin and the other upgrading the Bydgoszcz branch of the Gdansk Medical Academy into a medical academy in its own right.

The need for these establishments, at a time of large cuts in higher education funding, is not immediately apparent. According to Warsaw radio, however, there are "state and social reasons" for establishing a university in Szczecin.

These reasons, the broadcaster said, include "the traditions of Polish culture in the north-west" and "the requirements of the state's maritime policy".

Georgetown's new request fuels anger

from Peter David

WASHINGTON

Georgetown University, one of the United States' best-known Roman Catholic universities, is becoming ever more deeply mired in an angry debate over the use of political influence to acquire government research funds.

Earlier this summer it was accused by the Association of American Universities of exploiting its position in a fashionable residential area of Washington to cultivate key members of Congress in order to persuade them to pass legislation granting the university special treatment.

At issue was a decision by Georgetown to ask Congress for a \$160m grant for a project to generate electricity with fuel cells. Dr Robert Rosenzweig, president of the AAU, claimed the project had not been assessed by independent scientists and, if approved, would lead to a law of the jungle in university funding.

The AAU, which represents the 50 leading research universities in the United States, is one of many higher education organizations to have expressed alarm over recent years about the health of the government research system. The principle that government research funds should be shared out on the basis of scientific merit rather than political influence.

Although Congress has yet to decide on the fate of Georgetown's request, the university was plunged into new embarrassment this month when the presidents of two universities denied Georgetown's claim that they were partners in the controversial fuel project.

In a press release last June defending its request to Congress, Georgetown said the University of Texas and

Carnegie sets up university study

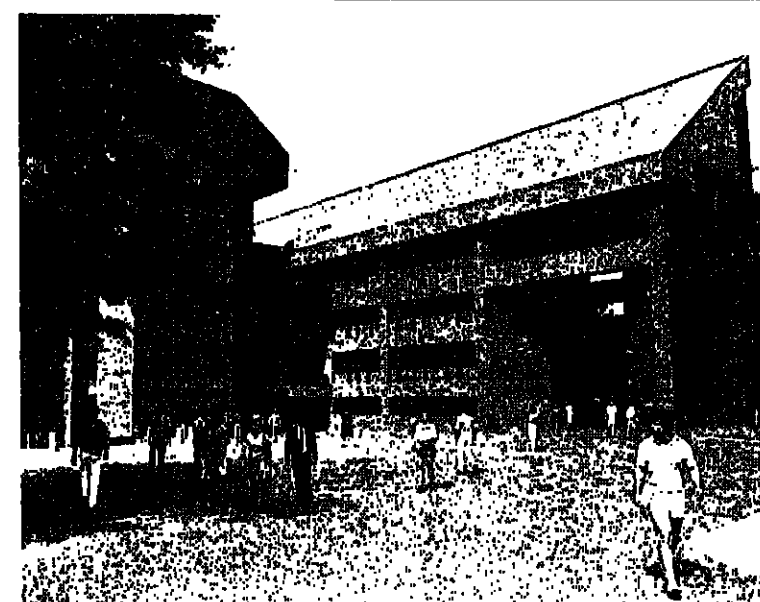
The Carnegie Foundation for the Advancement of Teaching last week announced plans for a major new study of American universities, citing falling morale among lecturers and the poor quality of undergraduate life.

The late night raid on the campus followed preparations on campus for a "Palestine week" exhibition. A similar raid six months ago by the security forces on a "Palestine Week" exhibition in the Islamic University in Hebron also netted quantities of alleged Palestinian nationalist propaganda.

Following the Al-Najah raid, an Israeli officer on Monday summoned university board chairman Hikmat Al-Masri, former mayor of Nablus, to his office and informed him that the university would remain closed for four months.

Mr Erakat said there have been no clashes between the students and the Israeli authorities since summer 1983. The closure, order will considerably delay the opening of the next academic year, scheduled originally for October. Israeli West Bank administration spokesmen said that the university had been repeatedly warned in the past few months about student nationalist activities on campus and that a closure order would be the result.

He said the university had been repeatedly warned in the past few months about student nationalist activities on campus and that a closure order would be the result.



Fashionable Georgetown is accused of making friends in high places

the University of Alaska would be partners. But the presidents of both universities deny they are involved, and say they would not join in a project that had bypassed the peer review system.

Dr Jay Barton, president of the University of Alaska, has written to Georgetown saying the inclusion of his university's name was specially embarrassing because he strongly supported the principle of peer review. The mistake was puzzling, the letter adds, because the only information Alaska had about the project came during a "casual conversation" at a party a year earlier.

A similar letter from Dr Haskell Monroe, president of the University of Texas, says it would not have been appropriate for Texas to participate because of the "unusual manner" in which Georgetown had sought Congressional funds.

Georgetown's president, Father

intake of students of agronomy is now 600, compared with 40 before the revolution. A record 400 agronomists will graduate next year, many of them specializing in new disciplines, such as plant health and animal husbandry.

Higher education is now free in Nicaragua, but only about 10 per cent of students receive full grants, covering all their living expenses as well as tuition. More than half the total number of students also have to work to pay for their studies, so that evening classes at the universities are heavily over-subscribed.

All graduates in high priority subjects have to do two years "social service" in the region from which they came, as employees of the respective ministries. They are then guaranteed a job if they wish to stay on. A quota system ensures that students come from all over the country, and that graduates return even to isolated and neglected regions such as the Atlantic coast.

According to the rector of the National University, Dr Humberto López, who was in London last month, the country will be able to absorb the growing number of medical graduates at least until the end of the century. He pointed out that there was no birth control programme in Nicaragua, and that the health needs of the increasing population were unlimited.

Heavy emphasis is also placed on agricultural disciplines. The annual

ties, to receive government support.

Other "social reasons" may refer to the significance of Bydgoszcz and Szczecin during the Solidarity period. In March 1981 Bydgoszcz was the scene of the worst clash between Solidarity members and the security police during the whole 16 months of the union's legal activity.

In Szczecin, in September 1980 a package of accords was signed with striking workers, comparable to the Gdansk accords a few days earlier, which tacitly extended the demand for free trade unions from a local issue of the Gdansk-Sopot-Gdynia conurbation to the whole country.

Finns ain't what they used to be

New research in Finland indicates that the present generation of students is becoming more puritanical than the last.

A survey of 1,000 Helsinki University students, aged 24 on average, reveals a strong groundswell of conservatism, prudishness and self-denial in contrast to the licence espoused and pursued by those before the oil crisis.

Tough competition for jobs in a period of economic uncertainty is attributed with engendering a brand of conservatism that has in turn fostered stricter attitudes and even intolerance.

Mr Osmo Kontula, the sociologist who undertook the survey, found that Christian values were being invoked to justify restraint - especially in sexual behaviour.

Dutch differential

A Dutch scientist in private industry has turned down a chair at the Technical University at Enschede because it would have meant a substantial loss of income.

Dr M. Viegars' salary at the Technical University would have been about £33,000 a year, whereas Philips Laboratories, his employers, were paying him close to £37,000.

Dr Viegars takes the view that future trends are likely to increase the divergence between earnings in private industry and in universities. He also stressed that university cuts in personnel and equipment had reached a level where serious research was threatened, and where competent staff could no longer be attracted.

permanent state of emergency. Priority students are, however, exempt from military service.

Another, less visible, relic of the past is the large number of students specializing in accountancy and business administration - Somoza ran the country like a large company.

Dr López, a psychiatrist trained in Mexico and the United States, found himself a victim of Somoza's own sea of priorities when he returned to Nicaragua in 1968. He was unable to find work in any public entity because of his political views, so turned his energies to founding the School of Psychiatry and to making a living in private practice.

He worked in the ministry of health after the revolution, and was appointed rector of the university by the National Council of Higher Education. He says university authorities will be elected in future, with participation by students and administrative workers.

A modest man, he is acutely aware of the deficiencies of the system that he has been appointed to run. He has no false pride about asking for help and understanding. But he stoutly defends the possibilities for higher education opened up by the revolution: "We must be on the right track, otherwise the Americans wouldn't attack us."

One reason for the scarcity of educational resources is the continuing war against the right-wing "contras", which has brought conscription and a

Students boycott lectures

from Carolyn Dempster

JOHANNESBURG
Two thousand students at the University of the Transkei (Unitra) have resolved to boycott lectures until the six lecturers deported from the homeland in May and July are reinstated. The decision was taken unanimously by the student representative council last week, shortly after the university's reopening.

The council called the meeting to discuss the findings of a three-man commission of inquiry which was appointed to investigate the causes of the unrest which began on the homeland campus in May and led to violent clashes between students and police and the deportation of the lecturers.

Among the "acute precipitating factors" cited in the commission's report were the apparent complicity of the university's senior administration with the Transkei security police; the failure of both the principal, Professor Ben van der Merwe, and the academic registrar, Mr S. D. Majokweni, to meet the students at critical times; the involvement of certain of the academic staff with the students; and the refusal by the security police to allow the students to hold gatherings.

On the basis of the report, the students resolved to embark upon another lecture boycott in solidarity with fellow students in sociology and politics who have been left without tutors, and in support of their demand for the reinstatement of the six lecturers.

This means that there is little hope of completion of the academic year. However, as students abandoned class for the sixth month running, Professor van der Merwe instructed deans of faculties to continue lectures for the benefit of those who still wanted to attend them.

In the meantime, lecturers from the University of the Witwatersrand and University of South Africa and Rhodes University have been approached to fill the vacant posts temporarily.

Approaches by the Unitra governing council to the Transkei government to withdraw the deportation orders against the six lecturers have so far been unsuccessful.

The university senate has also suffered as a result of the unrest. Two members of Unitra's enlarged senate, Professor John van der Vyver of Wits University's law school and Professor Dreyer Kruger of Rhodes University's department of psychology, resigned.

They issued a joint statement in which they said it was no longer possible to be associated with an institution which did not honour academic freedom.

Nicaragua's graduates of the revolution

by Colin Harding

Higher education has undergone a rapid expansion in Nicaragua since the victory of the Sandinista revolution five years ago. There are now about 36,000 university students, 22,000 of them at the National University's two centres at Managua and León. About 35 per cent of them are women.

In accordance with the areas of health, agronomy and agriculture that development has been most spectacular. The León medical school, for example, accepts 250 students a year now, compared with only 100 during the dictatorial regime of the late General Anastasio Somoza. There are 3,000 medical and nursing students in Nicaragua, the majority of them studying at the new health sciences faculty in Managua, founded in 1981.

Although the Carnegie foundation published a series of influential studies of higher education in the 1970s, its emphasis has been on second-order schools.

Dr Boyer said the decision to return to higher education was based on growing concern about the fragmentation of undergraduate life and confusion on many campuses about the curriculum of universities.

There is disturbing evidence that college students are not well-informed about the world in which they live, that they are becoming more parochial in the very time the human agenda becomes more global, that many students lack historical perspective and social skills," he said.

Dr Jekyll and Mr Hyde are still fighting, 100 years on. Today they struggle to dominate the public image of science, instead of the soul of Stevenson's divided hero. The Hyde camp is cheered on by Faust, Frankenstein, Dr Moreau and Dr Strangelove. Jekyll has backing from Pasteur, Fleming, Einstein and Marie Curie, though they disapprove of his training methods.

An assortment of commentators, form experts and hangers-on gathered in Queen's College, Oxford on July 21 to discuss future bouts along with representatives of the Royal Society, who are bidding for appointment as referees.

Officially, we were there as participants in the second week of the annual Oxford Science Studies Seminar, to discuss "the public understanding of science". The work of the journalists, sociologists, students, media studies buffs, adult educators and scientists who came was given a sharper focus by the knowledge that an *ad hoc* Royal Society working group is now looking at the same subject. "They're called an *ad hoc* group so they know they can't go on for ever", their secretary, Dr Peter Collins, explained.

It was quite easy to agree that more public understanding of science was a good thing. We were also against sin. But getting further meant trying to unpack the threefold abstraction of the subject - to refine ideas about science, understanding and, most elusive of all, the public.

One way in was to ask why public understanding was desirable. Dr Geoffrey Thomas of the Oxford department for external studies, organizers of the seminar, answered this historically. He distinguished seven common reasons given to buttress arguments that more effort should go into enhancing understanding of science and technology. First, there were scientific reasons. Public understanding of science was beneficial for science itself, encouraging continued support for research and recruitment of eager young investigators to the profession. As the prolific popularizer of science and science fiction author Isaac Asimov wrote re-

Reaching a public understanding

Jon Turney reports on the annual Oxford Science Studies Seminar

cently in *Nature*, "the difference to the public between a scientist and a magician is the difference between understanding and not understanding and that is also the difference between respect and admiration on the one side, and hate and fear on the other".

But of course there is a whole set of less self-serving reasons. A country needs trained scientists to compete in the international technological marketplace, and technologically aware consumers to create a market for new goods. Individuals need some grasp of science to help them reach decisions about what to eat, what drugs to take and when, and who is talking sense in scientific and technical disputes.

Related to this is the argument that democracy demands the voters know enough science to maintain collective control over research, so they are not disenfranchised by the experts. And there is a more general view that society would be improved in some way if its members had a clearer conception of what science is all about. Science might even be a model for ethical conduct of other human affairs.

Finally, aside from these pragmatic reasons, there is the argument of high culture. Not only is science good for you, it can provide intense pleasure, "making the mind tremble with delight", as one American writer once put it. Or C. P. Snow, whose critique of the two cultures always crops up at this point; he described modern science simply as "the most wonderful collective work of the mind of man".

Naturally, we wanted to know how this list fitted with the Royal Society group's agenda. Were they interested

in the nobility of man or the acceptance of new technologies and the relative gross national products of Britain and Japan? It is hard to tell from the published terms of reference, which appear to cover every aspect of the problem. The group is asked to "review the nature and extent of public understanding of science and technology in the United Kingdom and its adequacy for advanced industrialized democracy". But the detailed expansion of these terms takes in all the reasons Dr Thomas outlined.

Dr Walter Bodmer, chairman of the group, gave some idea of his priorities when he addressed the seminar. He knew the pleasures of science, but if this was the main reason for seeking public understanding science would be in the same category as the arts. These were important for their own sake, but science was much more important. And it was important for straightforward material reasons. "Probably first in our minds is the economic argument", he said. This helps explain the choice of Mr Kenneth Durham, chairman of Unilever, and Mr R. E. Aris, investment manager for Prudential Corporation, as members of the group, together with the expected sprinkling of scientists, broadcasters and educationalists.

Dr Bodmer himself is well-versed in the field, a veteran of an earlier inquiry into science and the media by the British Association for the Advancement of Science, and chairman of the BBC's science consultative group. And he emphasized that as director of research for the Imperial Cancer Research Fund his own work relied entirely on public support. The new committee will not just look at the media, he said, but will consider education as well. This raised the prospect of a long series of reports, as the group on public understanding of science is self-referential from a recommendation in an earlier Royal Society report on school science. That report expressed "real disquiet at the widespread ignorance of science and feelings of distaste and even fear regarding it".

That disquiet is widely shared. Dr Bodmer reported that the 70 or so submissions his committee were ploughing through reflected an overwhelming view that we do need a greater public understanding of science. But if so many feel the present level of understanding is poor, how do they know? Anyway, how is it being measured? One point which emerged clearly during the week was that different readings of understanding may not be compatible.

One view was that the Royal Society wanted to ensure education should add to the three 'R's enough knowledge of science to establish the three 'A's - awareness, appreciation and assent. Awareness is for the traditional targets of worthy British inquiries, the higher reaches of Whitehall, public institutions and industry, who behave as if they can get on very well without science, thank you. Dr Bodmer also stressed the need to get the importance of new technology through to middle managers.

Appreciation is less of a problem. Opinion polls generally show a substantial majority in favour of woolly pollsters' propositions like "science and technology have done more harm than good". In a simple world this appreciation would be translated into strong support for science and technology as they stand, but this isn't always so. There is underlying opposition to specific technologies like genetic engineering - Mr Hyde and Frankenstein still shape attitudes here. And the public still shows very little support for basic research.

The limits of scientists' tolerance for even this much ambiguity in public attitudes are indicated by a new study of scientists and the press in the United States described to us by Cornell University sociologist Professor Dorothy Nelkin. She pointed out the apparent paradox: that while science writers hold scientists in high esteem, and convey a very positive image of their work, they are often bitterly criticized by their scientific sources. Her evidence for the



positive image of science came from analysing the metaphors used to describe their work. The dominant images are still of alchemy and wizardry, together with warriors going into battle. The old clichés about the fight against hunger and disease are now overlaid by the economic war between nations, especially the United States and Japan - Samurai warriors versus Star Wars robots - but either way the warlike metaphors leave no room for doubters on the home front.

When negative images come in, the dirt doesn't usually stick to scientists. Researchers are seen as solving problems associated with risky technologies like nuclear power or pesticides. Nelkin found. They will discover the truth. Even potentially disastrous features of science like outright fraud in research are seen as aberrations. Consumer fraud is a rip-off, but scientific fraud is a sin, a transgression of normally impeccable standards.

Still the scientific community is not satisfied. Nelkin believes. They want the press to act as a direct conduit for their own image of science. Even though this is just what United States journalists do much of the time - a far cry from their treatment of politicians, for example - enough criticism still gets through to make scientists defensive when dealing with science writers.

There are other conflicts between different parties in this debate. Scientists tend to argue that the lack of understanding identified by opposition to some work indicates a need for more information. As Dr Bodmer put it in connection with the fashionable environmental issue of acid rain, emotion impedes rational discussion.

But this implies a particular model of understanding, where "misunderstandings" arise through possession of wrong or incomplete information. Several speakers challenged this model.

The Creationists in the United States, who hold that the literal truth about human origins is written in Genesis, provide the most striking example of the way understanding is structured by prior commitments. Professor Nelkin, who has also looked closely at creationist groups, described how they are still fighting in the American courts to win equal time in the classroom for Darwinian evolution and creationism. Ironically, these are presented as alternative scientific theories. There is even a lawsuit still outstanding against the United States National Science Foundation seeking equal funding for Creation research.

Even though United States polls show high appreciation of science and technology, three-quarters of the American public still support teaching both theories of human origins in school - Ronald Reagan among them. Presenting Darwinism and Creationism as competing rationalities would hardly appeal to a Fellow of the Royal Society. But it is hard to label Creationism simply a misunderstanding. Dr John Durant of Oxford illustrated the dilemma by asking how a student gives a flawless account of Darwinian theory but endorsing, "of course I don't believe any of this, the true account is in the Bible".

Students of the media present pose out that use of television and the press also needs to take account of the culture of the audience. Nelkin's Chelsea College, London, felt that still had a very poor theoretical grasp of what goes on when people watch television programme, say. His research with teenagers watching broadcasts about the nuclear accident at Three Mile Island in Pennsylvania suggested that they did have the abstract meaning of the accident, but the questions answered in the bulletins were not put in terms they could readily grasp.

So while one thrust of the discussion was the need for more research, as every good academic seminar, it was different kind of research. Opinion surveys and content analysis of the different media don't get a study of understanding very far. We need to know more about how relatively and groups take the messages they get about science and fit them into their own culture - whether a culture of space-invader players and mobile speed-increasing teenagers or of nostalgia for steam trains and predictable markets among traditional managers.

Meanwhile, prospects for improving understanding exist in existing text didn't look too bright. Professor Nelkin's finding of cool relations between science and the press in the United States was backed by strong criticism of the elitism of scientists from David Milkin, producer of the BBC's *Tomorrow's World* for five years. He reported that because his programme is popular, drawing audiences of 10 million some weeks, scientists refuse to take it seriously. But this low-key production was found to be a leading source of information about science and technology in a study by the Department of Education and Science. Mr Milkin argued that the success of *Tomorrow's World* suggested any lack of public understanding of science stemmed from "a refusal by the scientifically literate to talk in its own terms".

However, many in the audience were unhappy with Milkin's interpretation of meeting the public. He spoke of the assumption that the more people you make the recipient of information, the more likely it is to be taken in, a couple of nights before, the psychologist Professor Richard Gregory had persuaded just about everyone that the key to understanding lay in participation, in "hands-on" experience. This will be the hallmark of his new "Exhibition" in Bristol, a new kind of science museum for the United Kingdom.

In fact this was the only effective sounding innovation in promoting wider understanding of science in Britain which came up all week. The project is well under way. David Sainsbury has already committed £600,000 to the idea of building a dozen centres taking up Gregory's ideas up and down the country. Other wise, the main message for the Royal Society group, due to report by next Easter, seemed to be twofold. There is no necessary link between better public understanding of scientific knowledge and increased appreciation or support for science. And the best way in the long run to increase public understanding of science is probably to try and give scientists a better understanding of the public.

Eyes and ears of the DES? Karen Gold examines the role of Her Majesty's Inspectorate

Instant access when an inspector calls

Her Majesty's Inspectorate has a considerably longer history in something resembling its present form than the rest of the education service. Founded in 1839 on the model of the factory inspectors in contemporaneous industrial legislation, its main task was to ensure that Government money given to churches to establish elementary schools was properly spent.

Since then, its principal rights and duties have not substantially changed. Its right is that of access: no one (except universities, and not extramural or teacher training departments in those) can bar the door to HMI. Its duties are to make sure education spending is cost-effective, to provide information to central government, and to advise those responsible for running educational establishments.

When Lord Rayner's Government efficiency squad reported on HMI in

1982, it defined the inspectorate's role thus: "(a) to assess standards and trends throughout the education system and to advise central government on the state of the system nationally on the basis of its independent professional judgment. This is its first and overriding duty (italics added); and at the same time (b) to contribute to the maintenance and improvement of standards in the system by the identification and dissemination of good practice; by bringing to notice weaknesses which require attention; and by advice to those with a direct responsibility for the operation of the service".

The stress on HMI's primary relationship being with central government is repeated elsewhere in the

report. The name of HMI has become associated with independence from politics and politicians. But the Rayner report points out: "The independence of HMI is both highly valued and widely misunderstood. HMI does not have a constitutional independence... the duty of causing inspections to be made of educational establishments in the maintained sector rests with the Secretary of State and inspections are carried out on his behalf".

HMI's only independence lies in direct access to the secretary of state, to report what its inspectors see and to have their reports published as they wrote them.

The Rayner team also made specific observations about the further and

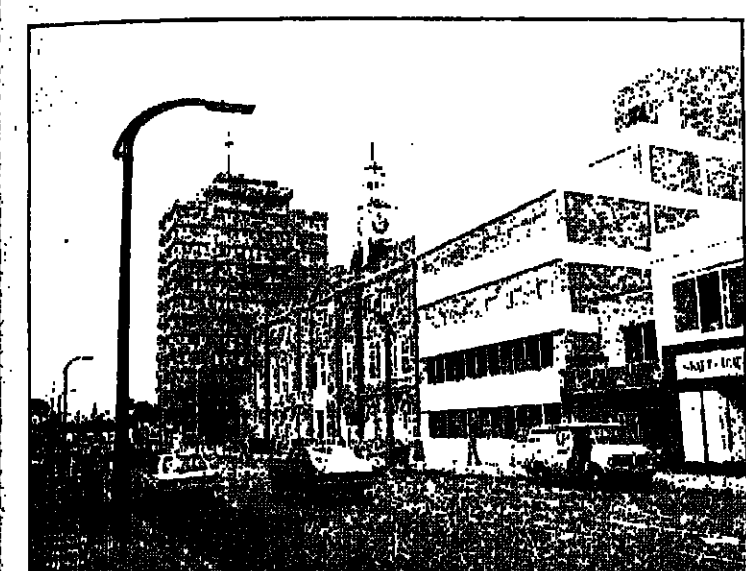
higher education section of the inspectorate. Its information base was "relatively feeble" the report said. It wrote far fewer reports. Most important, its relationship with institutions was different from that of schools inspectors.

It was too involved in course approval and not seen frequently enough in the classroom or lecture theatre.

HMI was crucial in central government policy-making for the education service, the report concluded. It "is trusted to provide authoritative and accurate information, useful advice, and sound judgment. As a professional body (its) professional competence is highly regarded and advice widely respected".



Lord Rayner: stress on Government relationship



PNL was investigated by HMI in May 1983. All allegations of bias were refuted.

Crucial steps on the road to power

How far is HMI part of the cut and thrust of educational politics? Traditionally the inspectorate's image in higher education has been an independent and discreet advisory service to academic staff, institutions and the government. But HMI's hand can also be detected in many of the government's most controversial policies and initiatives over the last 18 months, as the timetable below shows.

JANUARY 1983: From now on, all HMI reports to be made public. This includes reports of visits which took place long before the decision to publish them.

FEBRUARY 1983: "Write First Time", a small adult literacy organization, prints an unflattering picture and poem about the Prime Minister, and a left-wing commentary on government trades union law, in its nationally-distributed magazine. HMI is sent to investigate, report and impose conditions on the group.

MAY 1983: HMI goes into the Polytechnic of North London sociology and applied social studies departments, alleged sources of Marxist bias, at short notice.

JUNE 1983: HMI prepares for the DES and NAB detailed costings and teaching staff (teaching and non-teaching) ratios for every subject in the public sector. The figures quickly become known as "HMI Best Practice".

IN FEBRUARY 1984 these and HMI are compared by the DES with existing ratios. If adopted, they would mean the loss of 3,000 jobs.

SEPTEMBER 1983: HMI publishes its first major study of 100 degree courses in public sector higher education. Issues identified for further study include over-teaching, the need for professional up-dating courses, and problems of mature unqualified students.

OCTOBER 1983: HMI report on PNL is published, refuting allegations of bias but criticizing standards of work and student behaviour. Sir Keith Joseph, secretary of state for education and science, uses the occasion to announce he is considering an

inquiry into standards and validation across all public sector degrees. This becomes the Lindop Committee, announced in APRIL 1984.

OCTOBER 1983: Sir Keith announces HMI will inspect the Youth Training Scheme from this, its first year.

NOVEMBER 1983: HMI supplies NAB with a ranked list of all polytechnic town and country planning departments. The NAB committee's choice of three departments to close is based on that advice and a Council for National Academic Awards ranking.

DECEMBER 1983: NAB approves closure of Bristol Polytechnic's BSc in technology with industrial studies, the only polytechnic degree outside known fields of over-provision to be refused recruitment in 1984/85.

IN JULY 1983: HMI published a report of a 1981 inspection of the degree criticizing staff, student intakes, equipment and buildings, and implying that it had little justification in staying open.

JANUARY 1984: The government produces the White Paper *Training For Jobs*, which infuriates local education authorities by proposing the Manpower Services Commission takes over 25 per cent of their non-advanced further education. The government's case is that the present courses do not meet employers' demands: the evidence for this is quoted from two HMI reports on non-advanced and part-time education.

FEBRUARY 1984: HMI publishes a report on engineering degrees in the public sector, the area on which government attention and policy focuses.

APRIL 1984: The new Council for the Accreditation of Teacher Education is announced. For the first time its procedures mean HMI has a right of access into university education departments. HMI also says it cannot provide assessments of diversified teacher training colleges for NAB to make decisions on by the summer.

NAB makes no new decisions on the 12 colleges involved by its July deadline.

Watching and listening

BRIEFING

Her Majesty's Inspectorate is familiarly known as the eyes and ears of the Department of Education and Science. But in higher education, it is becoming the department's brain and its big stick as well.

Why does HMI's name crop up increasingly in association with new higher education policies, and its inspecting force visits polytechnics and colleges more than ever before? What is HMI doing, and why?

Two decisions by the current secretary of state for education and science, Sir Keith Joseph, help to start answering these questions. One was to reshuffle his departmental staffing not long after he took over the job in 1981, making do with fewer mainstream DES staff in order to increase the numbers of HMIs.

Between 1983 and 1985, HMI numbers are due to increase by 100, from about 390 to about 490. (The official complement in 1983 was 430, but about 40 posts had not been filled, so the official increase is smaller than the actual one.) Of those, the number of inspectors appointed to concentrate on further and higher education will increase by between 40 and 50, from 100 to 140/150; proportionately much more growth than for schools.

The second decision was Sir Keith's announcement that he would publish all HMI reports (except voluntary university ones) from January 1983. Published reports would not only spread HMI's findings across the country, influencing policy and management at local level, but they would also make the institution and local authority involved more likely to do something about it, particularly following another new ruling that they had to tell the secretary of state within three months of publication what they had done.

At the same time, two policy areas were developing in the DES in which HMI's activities in higher education - felt by senior civil servants at the time to be sketchy and lacking consistent information - were directly implicated. The first was the department's response to Sir Keith's consumerist emphasis on the quality of teaching and what was taught. HMI could be the secretary of state's education audit.

The second was the development of the National Advisory Body. Both areas involved strengthening the central administration of higher education at the expense of the local. But the NAB in particular needed a central assessment of quality parallel to the exercised by the University Grants Committee. Yet it was not to be allowed either to spend the money or gain field force.

Hence HMI's peculiar role of being in NAB but not of it, and its gain in power as higher education planning was centralized in a body which still did not have the last word. That last word in decision-making lay with the secretary of state. He takes his advice from the NAB, but also directly from the inspectorate. It has not happened yet, but the opinion in the DES is that it will.

In the DES scenario, as student numbers fall in future years HMI's role in identifying quality sheep from goats will become indispensable. So HMI must be reliable. That, according to a senior civil servant, has now "helped". "Everything used to be top priority for HMI. One thing would be good, another would be really good."

That has changed dramatically. Now they are prepared to differentiate between things. The inspectors now speak our language.

What are the changes within the inspectorate itself? Partly there is confidence in numbers. Senior inspectors admit that higher education coverage in the past was uneven, with plenty of expertise in non-advanced and vocational fields, much less in others.

That is changing with recruitment. New staff are planned in art and design, business studies, construction, adult and continuing education, the lower age and ability range of NAFE, engineering, hotel and catering studies, health and social studies, maths and computing, and applied social studies. For the first time teacher trainers are being specifically recruited. And there is a newly-created post of head of public sector higher education work, parallel to the area covered by the NAB, to which the deputy director of Plymouth Polytechnic, Dr Clive Booth, has just been appointed.

Using the new numbers, new forms of investigation are planned. Some, such as authority-wide studies which were recommended in the Rayner report on HMI, has already begun. They in turn will require studies of institutions rather than just departmental activities in polytechnics. In order to have an overall picture of local, regional and national provision at the centre.

Publication also means that HMI must be seen to cover the gamut of provision and quality, so particularly good or bad examples can be put in context.

There are new fields of investigation too. Teacher training, which was hardly inspected at all between the 1950s and mid 1970s now faces regular and rigorous visits. So do diversified colleges: HMI is working on what it thinks about the new combined subject courses that these colleges run. A study of education for employment among 16-19 year olds began this summer, as did another of part-time vocational advanced courses, in particular engineering, business studies and applied science.

Architecture, town planning, engineering, maths and computing and information technology - all, like the diversified colleges, high cost and at the centre of NAB interest - are all to be investigated.

Centrally, HMI is building up its database of quality judgments. Its coverage in higher education is becoming more extensive and more systematic. Its manner has changed: those on the receiving end of visits agree that, apart from appearing far more often, HMIs have ceased to be advisory and become - the word is used in the DES - inquisitorial.

Mr Eric Bolton, appointed senior chief inspector last year, acknowledges a change: "There is a concern to have more information about the higher education system, and we have to respond to that. As long as we make it public, then people can decide whether it's of use to them or not".

So what is HMI saying to people? In the present and near future, the three areas that appear to be occupying the inspectorate's thoughts are size, the quality of teaching, and the relationships between quality and cost.

On size there is something of a wrangle between the teacher training section, still convinced that small can be beautiful, and the higher education inspectors, particularly the chief inspector responsible for further and higher education Ned Norris. He is the originator of the term "critical mass", the point - defined variously as anything between 500 and 1,000 full time equivalent students - at which the higher education experience takes off.

"Critical mass" failed to have an explosive impact in the NAB study of smaller diversified colleges this summer, but may reappear in the government's promised Green Paper on higher education in the New Year. Quality certainly will.

Eric Bolton, thinking about how to define quality, sees the inspectorate's contribution as looking at teaching: "HMI will look at what actually takes place and report on the quality of teaching and learning. For quite a lot of higher education, that's a rather new idea. There's no agreement across the higher education world as a whole that anybody from the outside can look from the outside and comment upon it. I think there are very real limitations on HMI".

"But the inspectorate finds there are facts about teaching that seem to be fairly common. Kinds of expectations teachers have about pupils or students. Involvement of students in learning rather than being passive receivers of knowledge or hand-outs. In higher education as in any part of education there are factors that while not identical in every respect are fairly consistent."

One of them, in HMI eyes, is that more money doesn't necessarily mean better work. In a recent exercise, inspectors' assessments of quality in a sample of engineering courses were put through a computer together with details of the courses' funding and resources. The result, says Ned Norris, was that the resourcing of a course could vary by plus or minus 10 per cent without a direct relationship with its quality. Hence his attitude to the staff-student ratios put together for difference courses and used by the NAB; they were worked out at some speed, still need refinement, and "didn't do anybody any harm", he says.

Not everyone would agree. HMI's higher visits have stirred up much stronger reactions to it than in the past. Twice in the last year polytechnics have published counter reports to HMI's: North London on sociology and applied social studies, and Bristol on technology. Neither pulled any punches. Polytechnic directors have written to *The Times* refuting HMI findings. Bristol is now insisting that all HMI visits must have an agreed agenda and statement of their outcome. Eric Bolton, while pointing out that the inspectorate could not refuse to visit controversial places like PNL, agrees that the activity and the stakes are higher. "We are quite clearly under increasing pressure to use more of our time in relation to policy and policy interests and developing policy than we have ever had to do in the inspectorate's history."

"It's also much more fractious and troublesome because everybody feels life is harder at the moment. From years ago when nobody bothered what HMI said, suddenly everybody wants to know what HMI thinks; whether they like it when the get it is another matter."

YOUR DIRECT ROUTE TO A SPECIAL THES SUBSCRIPTION OFFER

If you subscribe now to The Times Higher Education Supplement for one year (52 issues) in addition to your weekly delivered copies we will also send you, absolutely FREE, a copy of the latest full colour edition of the Collins Road Atlas of Britain AND a copy of the latest Collins Road Atlas of Europe (together worth £8.45). Simply point your pen in the direction of the coupon below and send it together with your cheque or postal order, made payable to Times Newspapers Limited, for £30.00 to the address shown below.

Please note offer applies to new subscribers in the UK only and closes on December 31 1984.



Please send me a year's subscription to the Times Higher Education Supplement and my free copies of the Collins Atlases. I enclose my cheque for £30.00 (made payable to Times Newspapers Ltd). Please send to:

NAME _____
ADDRESS _____
SIGNATURE _____ Date _____

Please send this coupon with your cheque to LESLEY GRIFFITHS, The Times Higher Education Supplement, Priory House, 81 John Lane, London, EC1M 4BX.

Bernard Crick



Cold thoughts intrude into the summer vacation

As I was saying, the decline in standards of external examining can be directly correlated to a decline in the standards of academic hospitality. Such cuts are unwise. Second-rate treatment only gets second-rate externalists. I did not mean that such externalists may not be very conscientious, reading each paper even and understanding both the syllabus and the curriculum (if there is one), may not do the job better in a utilitarian sense, but a department really years for an external whom sister departments have heard of, who can carry weight in dual degree boards and whose very presence generally creates the illusion that their lonely professor moves easily among the great in the outside world, has not just sweated up through the internal grades and does not go to conferences for fear of "himself" all the time.

Someone sent me a long angry screed against the presumption of the vice chancellors to issue even guidelines for external examining. He cited charters and statutes that make clear that the granting of degrees was solely an internal matter, that externalists were "employees" (he did not flinch from ugly words) of a university, and that any changes to the contrary would mean waking up the Privy Council or Parliamentary legislation.

What an unreal world to live in. Only on a stage can a Figaro sing: "He'll pay the piper but I'll call the tune." Has he not heard how, with little respect for narrow legalism, our intellectual Seigneur of the ratpayers wing of a once great party has reformed the sword of state intervention in the very temple of individualism? Has he no sense of the nervous attempt at political shrewdness of the V-Cs in trying to preempt a major review of methods of assessment in the universities (ie standards - which are in decline everywhere except All Souls Peterhouse, Buckingham and the London Business School)? The chief and his new hand-picked Permanent Secretary, the tough lad, really do believe that they have a holy mission to stop money being spent on things they don't like.

Professor John Saville recently asked in your correspondence columns why the V-Cs have not protested publicly at the intervention of the Department of Education and Science or is it the Secretary of State and the Permanent Secretary in a personal capacity? Against the Open University's dear old course unit 104? And they are usually such devotees of the "thin end of the wedge" argument.

"Why?" Is my old friend joking or losing his grip? Leaving aside cowardice and dislike of public action and controversy - those two negative capabilities that have left so many free corporations and even republics defenceless in the past, as the historically minded may note, the main reason is fairly obvious: a hope that if the OU is thrown to the wolves, we fat mutttons may be spared. The V-Cs are so used to dealing with parlor lefties that they cannot grasp the obvious, that this new high and dry breed of right-wing politicians are not content with symbolic victories.

The OU has ever been viewed by the others as below the salt. I have come sadly to appreciate why most of my erstwhile Birbeck colleagues spend much of their time trying to look like something very dull and sound: an ordinary London college, rather than something quite extraordinary: together with the OU, Goldsmiths and the precious few full-time colleges of adult education they are perpetually open to alternative directions and a socially preferable mix of clients; but

practising christians, they are a living irritant to the Church. So the Golden Rule is dog eat dog.

So I found something deeply distasteful when my former colleague, Roger Scruton, in his column in *The Times* of July 31 joined in the baiting of the OU, bravely supporting Sir Keith himself and his hand-reared civil servant. The intolerance, pomposity and self-righteousness is obvious. The political folly is flagrant.

Need one explain? Our constitution rests not on law but on agreement; what the politicians of the leading parties agree to be the rules needed to play the game most of us want to play. If one party breaks these conventions without acceptance, as in removing representative government from the capital city and as in letting a minister of education intervene directly into the content of syllabuses, how can the others be restrained when they come to power? The true mark of the ideological mind is that policy is pursued from doctrine irrespective of prudence: as defeat looms, accounts are settled with the traitors within. And if they really believe that they can never be defeated, then in our kind of system all restraints go.

But beyond all that, I say "distasteful" and sanctimonious of the Scruton column because it is easy to attack publicly another institution teaching mature students, but painful and costly to set one's own house in order. Two doors away from Gower street is my own old department of politics and sociology, and we harboured Marxists and had some *Marxist* syllabuses. And across the Tottenham Court Road is an economics department, with an equally intellectually stimulating mix of perspectives. In each case the students like it. But the scriptures of our hero are only for public airing. He has never cared or dared to raise these matters in academic committees. Do not do good by stealth. Committees are boring. Hide not thy light under a bushel, set fire to it for public effects.

The seasons come and go. After external examining, some holiday - and for me, early and voluntary retirement. Is it very selfish to say that the disturbed condition of the universities today can stand in the way of scholarship and writing, at least for those too honourable to take their salaries and keep off committees? Besides, 30 years in one occupation is a long time.

The universities are a vast immovable force. They will defeat any minister who tries to remodel them by the back door, even with Quisling help; or, to be more precise, help from the old Oxbridge mentality that believes that if it doesn't matter to them, it doesn't really matter or it isn't really happening. But the inertia and inviolability need changing if universities are not to continue to lose public support and sympathy. Numbers, resources, tenure - the Robbins' legacies - have suffered internal debate about what should be taught, how and to whom. Looking at the present composition of the University Grants Committee, it would be laughable to expect a lead from them; and the few V-Cs or heads of colleges who have ideas find that their offices turn most of their golden speeches into leaden special pleading. Yet we are a pluralistic society (though both hard left and dry right work to a different, simple model of classes and the state or of individuals and the state), then reform and correction must come from within the corporate entities, not from the state. But it must come.

Peter David meets William Bennett, controversial head of the US National Endowment for the Humanities

Add a new name to the demonology of Reagan's Washington. William Bennett, the neoconservative Democrat appointed by President Reagan to head the United States' influential National Endowment for the Humanities (NEH), has become the latest in a long line of chairmen to be accused of politicizing the \$140m-a-year agency.

Bennett's sins, as trumpeted by radical journals like *The Nation* and *Mother Jones*, are manifold. After three years of his stewardship, the NEH has reduced grants to women and trade unions, purged itself of projects sympathetic to America's foes (such as a documentary film lionizing the Sandinistas), and noisily refused to comply with a routine request by the Equal Opportunity Commission to set "affirmative action" hiring goals for women and minorities.

Under Reagan, *The Nation* complained in April, the supposedly bipartisan NEH had become a "significant" political weapon for the administration. "Despite his claims to the contrary," Bennett has transformed the endowment into an ideological pork barrel," it added.

Controversy has certainly clung to the NEH, and the criticism has not come only from the radical Left. Last month Richard Lyman, president of the Rockefeller Foundation, complained that seven new people nominated by the administration to serve on the endowment's council had been chosen on the narrowest political grounds.

"I find the list disturbing," he told the *New York Times*. "The chief common thread seems to be working for the right-to-life movement. Three of them have no academic qualifications. The council is being more politicized than ever before and without regard to scholarly qualifications."

Bennett, however, shrugs off most of the tide of criticism. In an interview with *The THES* he said the appointment of lay members was a long-standing tradition at the endowment. And although he makes no apology for using his chairmanship as a "bully pulpit" from which to express his own strong convictions about the humanities, he claims seldom to have imposed them on the endowment's grant-making process.

There is indeed little evidence that Bennett has interfered often in the heart of the endowment's work. The peer review of grant proposals, but he has undoubtedly presided over a deliberate shift in the agency's governing philosophy, a shift characterized by critics as a lurch to the right but justified by Bennett as a return to academic rigour and a purge of intellectual wooliness.

The principal directions of change were mapped out in a 1980 critique of the endowment published by the conservative Heritage Foundation. Bennett, then still director of the privately funded National Humanities Center in North Carolina, had a hand in the Heritage report and has faithfully executed its recommendations as chairman.

Although it conceded that the endowment had financed some good work, the Heritage report argued that NEH, like its counterpart, the National Endowment for the Arts, had diluted its intellectual quality in order to expand its popular appeal. As a result, federal grants had underwritten many of the "faddishly innovative" but "narrowly political and ideological" projects.

After his appointment in 1981, Bennett lost little time letting the humanities community know that he intended, as the Heritage Foundation put it, to support the humanities and stop funding "sociological crusades". One of his first acts was to denounce as "unacademic" a film, *From the Ashes*, which the endowment had partly funded.

Although Bennett acknowledges that the film was an unusually egregious example, he claims that under his predecessor, Joseph Duffey, the definition of the humanities had become too loose, with several grants "veering towards political harangue rather than scholarship". Under his own leadership, he says, the endowment has begun to insist on a stricter construction of the humanities.

The endowment has certainly worked hard to winnow out projects tainted by political partisanship or, almost as bad in Bennett's eyes, shallow trendiness. Reviewers have been asked to ensure that projects touching on poli-



Human face of a Reagan demon

tical issues are balanced, and a division of special programmes, which came in for sharp criticism in the Heritage study, has been disbanded.

Inevitably, the onslaught on what Bennett and the Heritage Foundation regard as political propaganda has been interpreted by critics as a more or less cynical attempt to move the political ideology of the endowment closer to the right. Thus several awards under Bennett have been criticized in precisely the same terms as those of the Heritage Foundation have used to criticize the Duffey regime. Example: a grant of hundreds of millions of dollars to an avowedly conservative group to help it disseminate newspaper articles about constitutional issues.

Bennett nevertheless scoffs at allegations that he has politicized the foundation. "I take some joy in the fact that to be criticized my views have to be caricatured and distorted," he says. He ascribes much of the criticism to resentment on the part of people who are no longer receiving grants because of the endowment's new emphasis on mainstream scholarship.

A number of Bennett's views have undoubtedly been caricatured. Contrary to what his critics say, he does not believe it possible or indeed desirable to rule out political content and conviction from the humanities. Nor does the endowment appear any more marked than the leftward tilt that characterized its philosophy under the Carter administration.

Some swing of the ideological pendulum is clearly inevitable under a system which makes the chairman a political appointee. Duffey, Bennett's predecessor, received the chairmanship in partial reward for his sterling performance in Carter's presidential campaign; not unnaturally, his incumbency was marked by a special sensitivity to Carter administration priorities.

It is hard to say whether Bennett has been any bolder in putting his own ideological stamp on the endowment. Certainly, the liaison officers and the policy of "affirmative action" have not survived the new regime. The notion of racial or sexual quotas, anathema to the neoconservatives, was piloried by the Heritage report.

Bennett, a constitutional lawyer and author of a book strongly critical of quotas, caused a major rumpus when he refused a request by the Equal Employment Opportunity Commission to analyse the endowment's staff or to set numerical goals for hiring blacks and women. "The fundamental idea of America," he

asserted, "is contained in two simple words: no privilege."

One way to dampen the political shifts within the NEH, recommends a recent *Twentieth Century Fund* study by a former endowment trustee Stephen Miller, might be to endow the British Academy by putting it under the control of the endowment itself. A staff official and elected president who would remain an academic scholar. Even that, however, is unlikely to end all controversy at the agency.

For one thing Congress, the endowment's creator and paymaster, has never been entirely clear about what it expects from the NEH. Since its birth in 1965, successive chairmen have been dragged before committees in Capitol Hill to provide instant summaries of what the humanities were and to explain their value.

Meanwhile, those politicians who do take an active interest in the endowment's development disagree fiercely. One faction, championed by Senator Claiborne Pell, has grumbled for years about the excessively close relationship between the endowment and the university establishment; what is needed, he says, is an endowment willing to reach beyond the academic mainstream to make the humanities visible in everyday life. The other faction believes the humanities will become a potent force in public life only by focusing on the highest standards of traditional scholarship.

Bennett is firmly in the latter camp. He sees the main task of the endowment as encouraging and preserving scholarship; the initiatives which have pleased him most include grants to libraries and grants that enable scholars to visit them.

The preservation of scholarship is associated in Bennett's philosophy with a campaign against what he discerns as the intellectually trendy and the self-indulgently obscure. While the endowment will still happily fund anyone who appears to be on the cutting edge of critical theory, Bennett makes no secret of his distaste for many of the more recent developments in literary criticism and philosophy.

"The larger point is not so much the field or that field of semantics as opposed to traditional literary theory," he says. "There is, and this arises in part from conventions of scholarship and in part from the pressure to publish, a kind of interest in trivialization of the disciplines that seems to be very bad for the future of the humanities."

"It has something to do with specialization. But it also has something to do with, for some, a self-righteous position, and for others a kind of perverse pride in doing things of which that others cannot penetrate them."

Under Bennett, the message from the endowment is that the humanities can be made accessible without compromising academic standards. He has, accordingly, preached and paid for a back-to-basics philosophy designed to stimulate new interest in the great texts of western civilization, among secondary school teachers as well as university lecturers.

Under one new programme, for example, the endowment is providing money for secondary school teachers to spend six weeks being tutored by university lecturers. The emphasis is on teaching techniques. Bennett has also carried his crusade to the universities, exhorting postgraduate courses for allowing themselves to become a smorgasbord of dispiriting disciplines devoid of any genuine quest for wisdom.

To many in the humanities, Bennett's drive to return to great texts and abolish relativism is at best simplistic-minded, at worst an unjustified attempt by a political appointee to meddle in the work of the universities. But Bennett, while he decries the change the climate of opinion in the humanities, claims to have kept his personal preferences out of the endowment's grant-making procedures.

Nor is he convinced that fear of "politicization" is responsible for all the controversy that has surrounded the agency. "I think part of it is people wanting me to say that everything is terrible. They are doing in the humanities in all these that all the subdivisions of it are great fields are wonderful. Well they are not, some of them are dead ends, and I certainly would not be credible if I took that view."

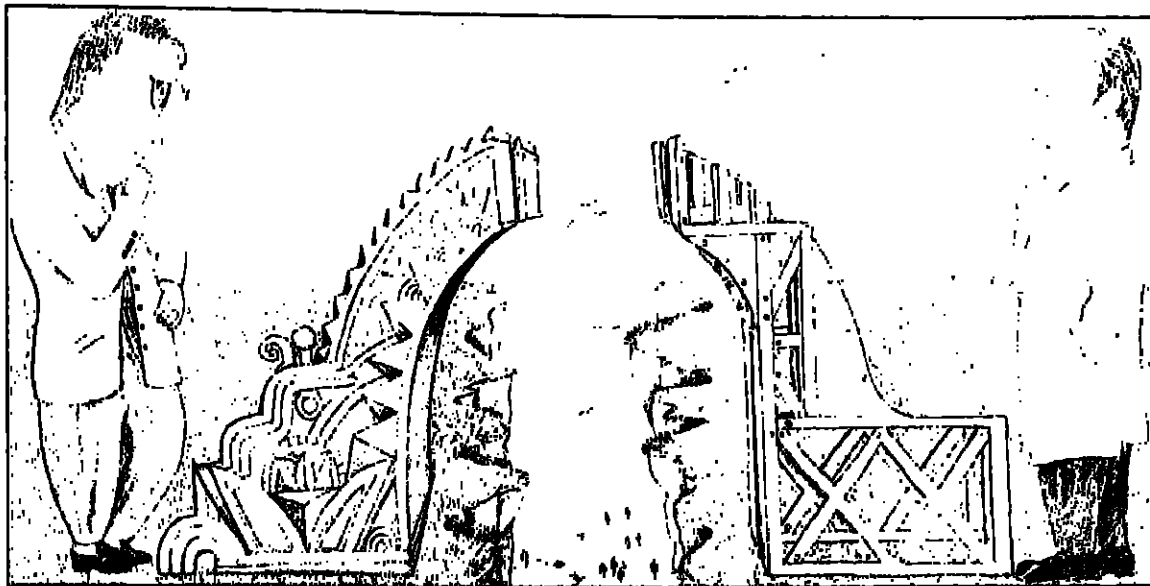
Judy Attfield considers a subject poised on the great divide between art and science

"Design" has a rather anagynous image, poised between aesthetics and science, neither wholly art nor wholly science; across the divide of the two cultures, it identifies with both. There is also the social divide which separates art, with its elite connotation, from the dirty overall image of engineering. It is this seemingly unresolvable contradiction which continues to confuse the identity of design and which serves to explain the stormy and roundabout route it has taken to obtain a place in the education establishment.

From the inception of the first school of design in 1837 to the institution of the first degrees in design in 1972, the discipline has had to fight to win professional status and academic respectability. While fine art along with other liberal subjects, continues to lose credibility, design is seen - by the Government - as a subject worth promoting in the interests of commerce, a relevant subject.

At present the growth area is aimed at the non-designer: the consumer and design management in industry. Since 1982 the Department of Trade and Industry has invested £10m in a design for profit project and a funded consultancy scheme for industry. At the other end of the scale the Royal College of Art's education unit has been talking about broadening the net to catch potential consumers young by initiating them into "good design" as early as infant school. Since the 1960s there have been attempts to introduce design into secondary schools as part of a core curriculum but art and design are still regarded as areas for the less academically able. It is only since 1982 that engineering departments of universities have jointly agreed to accept design as part of their A level entry requirements and that only from an approved list of examination boards.

Design, in its broadest and ideal sense, encompasses the whole process which resolves and enables a feasible



Design for learning

product to be manufactured. But what industry calls the "sound commercial product" rarely emanates solely from the expertise of a professional designer. More often than not it is shaped by an amalgam of tacit traditional practice, policy formulated by a board of directors, and market research. How the activity is represented on most design courses and by professionals is much more to do with the separate business of conceptualizing the form of the object in question. It is more to do with art in the guise of design, of aesthetics and a standard of taste.

Most courses have treated design as if it were an autonomous activity. When students get a glimpse of the real world, through a placement in indus-

try, they find that the extent of decision making which they actually have under their own control may be as limited as choosing between one of two colours, revamping an old design with a few details to make it different, or interpreting a pattern specified in detail by a client (a non-designer) into a drawing to programme a machine like a jacquard loom.

Our design colleges still retain the art school ethos which sees artists as highly original individuals seeking to express themselves through their art. Designers, however, must learn to mediate, to work in a team and interpret the client's ideas in terms of production and budget constraints - an activity requiring a practical approach

rather than inspiration. Contemporary art and design education is based on reforms stimulated by the National Advisory Council of Art Education under Sir William Coldstream (Shade professor of fine art) in the early 1960s, and a series of moves to match awards to the academic establishment and the funding system. The Coldstream report gave new prestige and respectability to design by coupling it with fine art under the new Diploma in Art and Design (DipAD). It recommended four areas of specialization which emphasized the new philosophy of "broad context" in keeping with the liberal education it considered appropriate, rather than the narrow technical training offered by the

When "design" is used in the more commercial sense - for instance when we are told in an ad that a product is "made by design" - the meaning is different again. Here we are dealing with image, the styling of a product like a car or a toothbrush, whose looks embody meanings connected with status and performance. Often, it refers to the outer covering alone, separate from the "works". Sometimes it is just a detail as in the so-called "designer pen", an ordinary ball point in a coloured plastic casing with a transfer pattern added to it. It is the artistic touch which is supposed to give it a luxurious appearance which will justify the added expense.

This attitude to design, of regarding it as an added extra, a more self-conscious finish, rather than a whole process of working out the best materials, shape and method of manufacture to make a product which will function well at a reasonable cost, was the very thing William Morris waged against.

Morris, the spokesman for the arts and crafts movement, voiced the ideas of a generation of makers of the nineteenth century who perceived a connexion between aesthetics and morality - that beauty was the formal outcome of a thing made with honesty and fit for its purpose. Strongly attached to this was the notion that an object to be truly beautiful had to be pleasurable to make, useful and available to all. In this way, it was thought, art could be inserted into the everyday lives of ordinary people and not kept as the exclusive prerogative of a particular class, or, according to Morris, "the swinish luxury of the rich". Morris could not reconcile the dehumanizing industrial process necessary to mass production with the making of beautiful and noble objects.

The Great Exhibition of 1851 revealed the poor standard of British design compared to Continental competitors and brought fresh resolves to improve the aesthetic education of manufacturers in order to capture wider export markets. A story not unlike the one we hear today. The person brought in to rescue the situation was Henry Cole, a civil servant with an interest in design. His first task was to reorganize the design schools established in 1837 but by 1852 torn by controversy and falling finances.

This he did by introducing art education into the curriculum of elementary schools and turning the Head School of Design (later to become the Royal College of Art) into the Metropolitan School of Ornament for Males; under the newly formed Department of Practical Art of the Board of Trade. By the time it moved to South Kensington in 1857 it had become the National Training School, its main responsibility now to train art teachers for the national schools. The original project for production of industrial designers was abandoned and in its place was a centralized institution controlling the right to train from South Kensington system of art education based on mechanical repeated copying

from a standard drawing book. Cole succeeded in making the system self-supporting by enlisting financial support from industry, encouraging the entry of middle-class students into the art schools and by using a "payment by results" method of paying the art teachers which depended on students' performance which could conveniently control expenditure through regulating exam standards.

The only part of Cole's educational programme which dealt directly with design was the establishment of a collection of "teaching pieces" at the South Kensington museum intended for the instruction of craft apprentices. For the education of the public in general he mounted exhibitions such as the famous "Chamber of Horrors" which showed "examples of the false principles of decoration". We were reminded by the V & A's recent "Taste" exhibition that it still includes in its custodial role that of the guardian of good taste. Since the opening of the Bollerhouse project funded by the Courant foundation there seems to have been a policy of promoting the modern movement style as the "good design" model of current good taste in industrial products. Their defence against the criticism that they do not represent popular taste is in asserting that "good taste" can be "scientifically determined", very reminiscent of the statement made by the unnamed government inspector, thought to be a caricature of Cole in *Hard Times*, who said: "What is called 'Taste', is only another name for Fact."

It is difficult to envisage a return to Victorian unquestioning acceptance of the old orthodoxy of academic principles. But there is a reactionary tone about the "neo-academicism" lobby which reflects current materialistic concerns with scientific training towards practical ends rather than in education for developing the individual. It is surprising to find this view, well known to be that of the Thatcherite Manpower Services Commission, echoed by left-wing political opinion on art and design education, albeit for different intentions.

On the left there are those who advocate more emphasis on skills and knowledge in art and design education and less on cultivating creativity because fine art attitudes encourage elitism. This view advocates design as a cultural activity whose aim should be to benefit society rather than to develop the individual in which art is used as an expressive vehicle. The intention is commendable but it is difficult to see how skills and knowledge alone will achieve the required result. They are, of course, much easier to teach and to evaluate, depending as they do on unquestioning acceptance of a body of knowledge and a right way of working. This knowledge, however, does not encourage students to make their own critical judgments and therefore to be inquiring, experimental and innovative - all qualities needed in designing and generally useful in life.

A scientific problem-solving approach alone is

not enough in design, because it depends entirely on a mechanistic establishment of the problem very precisely at the beginning and leaves no room for a pragmatic adjusting to problems as they arise. It also entirely overlooks the aesthetic dimensions of design. The short-lived school of Ulm in Germany under Tomás Maldonado (1956-mid-1960s) put this operational research method into practice but was not able to solve the problem of style by scientific analysis.

One answer offered to the problem of the aesthetic dimension is the contention that the appearance and form of objects are their cultural function. But use alone does not take care of wants, desires, pleasure, joy or delight; and it is that impulse which operates most strongly in the market place when people are allowed choice. Some see artists' crafts as the space in which designers can feel part of a decorative tradition denied them by the austere unadorned modern movement machine aesthetic imposed by the economics of mass production.

This idea of a two-tier economy in which industrial design for mass production can coexist with artistic craft production is very close to the adaptation of the arts and crafts ideas of Morris by people like Abbes, Gimson, Barnsley, and most significantly by W. R. Lethaby. He was an architect and first professor of design at the Royal College of Art in 1900 when once again an attempt was made to train designers for industry. He was also founder member of the Design and Industries Association, and principal of the Central School of Arts and Crafts. He was particularly interested in encouraging the cooperation of architects with artist craftsmen and he considered industrial design a "second order lesser craftsmanship" necessary to provide "the community of plain honest folk" commodities at moderate prices.

The two-tier class-bound economy which categorizes high-with-art process with craft, and low-without-art process with mass production is still with us and is reflected in our art and design education. While fine art has been marginalized, what was once called craft, and is now subsumed under design, has filled the space art vacated. Many of the BA graduates of art and design courses call themselves artist/craftsmen and women. They produce modern-day art objects in the form of ceramics, textiles, graphics, and so on. The Mellor committee report on the design of British consumer goods published last year confirmed the view that industry consider design graduates "high on imagination but lacking in knowledge of industrial processes".

The quality of design form between conceptual and technical processes continues to defy a satisfactory educational solution while the social divide still exists between the prestigious art-orientated degree courses with technical content and lower status technically orientated non-degree courses which do not allow creativity.

National Diploma in Design (NDD): 1) fine art; 2) textiles/fashion; 3) graphics; and 4) three dimensional design (the last used as an umbrella to cover a whole variety of disparate subjects ranging from theatre and interior design to product design, ceramics, jewellery and furniture). Students applying to the three-year DipAD courses had to have completed a foundation course, to be 18 years old and to have a minimum of five O level passes.

The NDD which the DipAD replaced was brought in in 1946 as an attempt to channel a branch of art education specifically to producing industrial designers, or what John Gloag called *The Missing Technician in Industrial Production*. Craft was treated as irrelevant in an age of mass production although it continued to be taught in many courses. By 1957 the NDD was being assessed by the Freeman report as inadequate and just as a way of producing highly qualified "manual labourers". The intention of the DipAD was to produce professional designers: "DipAD must turn out executive material - the sort of people who will be hirers and firers of men". The more academically directed DipAD with its 15 per cent course content of art history and complementary studies saw fine art as the focal point of a broad generalized education.

There were many doubters at the time who felt that such a course would reproduce the mistakes of the Royal College and merely succeed in turning out another generation of art teachers rather than the much needed designers for industry. It also reinforced the two-tier class division even further between the idea of an art-orientated designer educated to be a decision-maker and the vocational course technician trained to follow instructions.

The Coldstream recommendations enabled a break with the Government-controlled examination system which had existed since 1853. At the same time the National Council of Diplomas in Art and Design under Sir John Summerson (architectural historian and curator of the Sir John Soane Museum) was set up as an independent validating body in charge of scrutinizing curricula, standards of admission, performance and quality of courses. Its first task was to pick out the schools which would be allowed to award the new DipAD. Out of 170 establishments 29 were favoured with the privilege, forming a new elite in art education with a qualification intended to be equivalent to those awarded by the new college of advanced technology. But when the Robbins report of 1963 recommended that 10 CAs should be given university status by being allowed to confer first degrees, art colleges saw themselves falling behind in the funding pecking order and pressed for equal status.

In 1967 the Royal College of Art was made an independent university able to award its own MA degrees. There were still no first degrees in design, however, because universities only offered fine art. The Council for National Academic Awards, established in 1964 was able to validate degree courses in institutions other than universities. Since 1972 degrees in art and design have been available by adapting DipAD courses. They are not independent like the RCA but must face constant scrutiny from the CNA committee for art and design.

It was hoped that the integration of a number of art colleges with polytechnics in the 1970s would effect some contact between art and engineering but this has not happened yet. The Design Council strategy to extricate design from its art connotations has been to redefine its areas of activity under the headings of *Industrial Design* responsible for "appearance of products and the way in which people use them" and *Engineering Design* in charge of "products' performance and production". The problem is aligning this formulation with existing design education. In the Design Council handbook on design courses it states that: "... it is now very much a case of art or design rather than art and design, as was once the case." The fact is that what it calls "very art orientated" so-called design courses ... in areas such as printmaking, textiles, ceramics, graphics and illustration", still vastly outnumber courses on industrial/product design and engineering design.

The author is an interior and textile designer. She teaches part-time and works as a colour consultant.

Innovation and consultation

The consultative paper on *The Future Development of the CNAA's Academic Policies at Undergraduate Level* issued by CNAA in May, 1983 did not spring out of nowhere, but its origin was not the problems of national planning which formed much of the background to the University Grants Committee and the National Advisory Body documents. The CNAA paper was the outcome of a wide-ranging two-day seminar with invited participants, many of whom had produced substantial papers for discussion on pre-identified topics.

The indications that a considered review of this kind was timely do not need to be rehearsed here; they are set out in the preface to the consultative paper. They can be summarized though by a sense that despite the very many and often far-reaching innovations which had taken place in British higher education – especially the public sector – over the last 20 years or so there is still room to make the system more innovative, more flexible, and more responsive to demand particularly as the resources available to the system shrink in real terms.

Although the papers which were read and discussed at the seminar explored some fundamental – even philosophical – questions (such as: what do we mean by degree and by honours? What should be our criteria of assessment?) the main focus of the consultative paper was more down to earth. Essentially it is asking the question: are there ways in which the CNAA's own policies and regulations should be developed so as to encourage greater flexibility, and to allow institutions more easily to satisfy the future demand for higher education? In other words, how can the CNAA ensure that its academic policies and regulations do not act as obstacles to the kinds of educational developments which might take place in the 1990s?

The first key issue identified in the paper was access, and the more specific question: why does the overall pattern of qualifications held by entrants to CNAA-approved courses so little depend on the norm of A levels (or their equivalent in terms of BEC and TEC qualifications and so forth)? Why, in other words, are there so few non-standard entrants?

The responses were remarkably uniform. Essentially they are saying that while there is a low take-up rate among non-standard entrants, this is not due to the CNAA's regulations, nor is it due to institutions' own internal policies.

The answer seems to lie, first, in the CNAA's subject boards, who are likely to raise awkward questions about non-compliance (which institutions believe are likely to rise, if a more flexible admissions policy is adopted). And second, it is due to the resource weightings for part-time study, and the personal financial disincentives which the part-time student faces.

Individual institutions have their part to play in opening up access to higher education through their own policies and practices. Institutions very

R. A. Barnett of the Council for National Academic Awards discusses the future development of the CNAA's academic policies

often express support for admission on the basis of applicants' past informal learning achievements and this is a view which the CNAA supports and wishes to give practical assistance in implementing.

number of institutions also touched on access courses themselves, and suggested that the CNAA might actually formally recognize these courses. The CNAA has always been reluctant to go down that road. However, access courses are being encouraged, and a leaflet is being produced for general consumption which will contain a comprehensive list of access courses.

The second set of issues in the paper was concerned with curriculum innovation – or the apparent lack of it. The paper suggested that the range of curricular objectives is often fairly narrow, especially in terms of the ways in which the student's achievement of objectives is concerned.

Institutions are saying that they are in favour of curricula innovation, particularly the developments which encourage a problem setting and a problem solving approach, focused much more on the needs and interests of the individual. The underlying message though seems to be that the key explanation for not moving rapidly ahead in this way lies principally in the inertia of the academic community itself, the departmental structure, and the subject-based interests of staff.

If this is the case, the main responsibility for change presumably lies then within the institutions themselves. But many institutions seem to be saying that the CNAA could assist, not just on technicalities like reviewing the requirements for invigilated examinations, or investigating the extended use of transcripts, and the development of student profiles, but even more by setting the right climate for innovation. This is something that the CNAA would want to act on, though it will inevitably consume resources.

The third issue in the paper was this: what is meant by a *course of study* at any level? Can it be fixed in terms of the number of curricula hours, or the number of years (ie the minimum duration), or in terms of the student's registration period (ie the maximum duration of a course)?

That leads to the question: should students be permitted to opt in and opt out, and switch modes at will, as their needs change? If we move in this country to a more ready acceptance of credit transfer and credit accumulation across institutions, are we going to be able to retain the concept of "a course"?

On these matters, institutions were generally keen that the CNAA should introduce more flexibility over the formal parameters of a course, such as its length, the student's registration period, and the opportunities for students to step on and step off.

But institutions pointed out that moves of this kind would not be uniformly supported across all subject areas – engineering was mentioned as an area where moves towards greater flexibility would not be accepted. And the few responses we received from professional bodies also bore this out.

The fourth set of issues considered focused on the present patterns of CNAA awards. And here there were two key issues. The first was whether there should be a new role for the CNAA certificate, tying it in explicitly to other CNAA awards. This might be especially welcome to part-time mature students who wished to see some tangible evidence of their achievements and progress. (The certificate is intended for one year full-time courses which bring students to a point equivalent to the end of the first year of an honours degree course.)

It is clear from the responses that there is widespread support for a development of this kind, so that the certificate becomes the first rung on a ladder of award extending through the DipHE to degree and honours level, and possibly even to a PhD.

Thoughts of this kind also have implications for the second main issue in relation to our present pattern of awards – the relationship between the CNAA awards of degree and degree with honours. At present, slightly registered students on first degree courses take the award of honours degree (with the rest taking the degree) though this proportion varies considerably across subject areas.

This is not to say that the programmes leading to the awards should always be kept separate. Indeed, many institutions associated with the CNAA have developed "undifferentiated" schemes (as they are often called) which may lead to either or even both awards, providing the CNAA can be assured that the qualitative difference is being maintained.

Arising from this structure of awards, the consultative paper identified several questions, including:

● Why, in certain subject areas, is the award of degree almost unknown, whereas in other areas, the award of honours is rarely available?

● How in any event is the qualitative distinction between the degree with honours and the degree to be maintained?



tained? What is meant by it? What criteria should be employed to assess a programme of study or a student's performance to be worthy of one or other of the awards?

● Is it right that the award of degree be available at all for the student who fails at honours, while no matter what level of achievement is attained by the degree student, he or she is unable to be awarded a degree with honours?

● Should a student have an automatic right to be reassessed for the award of degree – following failure either at honours or at degree?

Underlying these questions – to which the CNAA received quite different kinds of answers from institutions – there seems to be more general kinds of consideration:

● What are the distinctive roles (if any) of the two awards of degree and degree with honours to be?

● Is it realistic for the CNAA award of degree to play so many different roles – or should a new kind of award, say pass degree, be introduced for those who narrowly fail honours?

On the other hand, if one believes that there is a large constituency of people – particularly adults, often without many or any qualifications – who would like to be able to take advantage of higher education the question facing us is, how can we adapt our present arrangements to assist that aspiration? How then, in principle, can we get the current input of students into a significant number of honours degrees? How can we ensure that the NAB has adopted revised formulae for weighting part-time study more generously (so far as resource allocation is concerned). And the UGC too is turning its attention to the same problem. Is it the case that this policy is being taken on board somewhat surreptitiously without being recognized as a deliberate policy of shifting in a major way the shape of higher education in Great Britain?

The other major policy option which

has been floated here is that of moving the whole system to something less than the honours degree. We should note that this policy option suggests itself as an option for serious consideration whether we stay with the present system or whether we move to a situation in which a very significant number of students gain their initial qualification via part-time study. Overwhelmingly, institutions are saying that they are against moving to a two-year course as the norm for the initial programme of study. However, they are generally silent about whether they find acceptable the possible consequence of that viewpoint – that many who are qualified and keen to take up higher education will be unable to do so, and that the unsatisfied demand for higher education will continue to grow.

So far as the colleges in England and Wales and the Scottish institutions are concerned, the message seems to be not that a new CNAA sub-degree award should be introduced, but that we should seek to reassess and clarify the role of the Diploma of Higher Education and should collaborate with BTEC and the equivalent Scottish bodies over sub-degree provision in general.

One response would be to embark on a major modification of the structure of awards, particularly at the undergraduate level. The other option, and this is the sixth set of issues which was raised in the CNAA paper, is that of developing a fairly systematic way of the opportunities for credit accumulation and credit transfer across institutions. The basic idea is that students could receive a standard amount of credit for studies which they had successfully completed. This would enable students more easily to move from one institution to another as their needs and interests change.

The trick is to generate that kind of flexibility without at the same time either imposing a uniform grid of structure to which courses have to conform or establishing an unwieldy bureaucracy that might make transfer between institutions more rather than less problematic.

Institutions were also saying that moves to opening up opportunities for credit accumulation should not threaten the intellectual integrity and coherence of the student's programme of study. This is clearly an important matter, which cannot be ducked.

What is being said to us is that it is not the regulations in themselves which are a problem. The problem rather is one of implementation of style. Short of starting all over again it is doubtful whether there is any simple way in which the regulations can be made more accessible and more "user-friendly".

But the way in which the CNAA presents its regulations can surely only have a marginal effect. For we are dealing here with fundamental assumptions about higher education which are deeply embedded within the

The author is assistant registrar at the Council for National Academic Awards.

granted specific amounts of credit for their past informal learning achievements.

The other area of development, so far as credit accumulation is concerned, is the proposal by which individuals would be able to register directly with the CNAA, which would assess their past qualifications and give them a credit rating, and on that basis identify a programme of study perhaps drawn from more than one institution which would enable the student to gain the award being aimed at.

The future demands on higher education in the 1990s are unclear, but no single grand policy initiative will meet our future needs. It means too that we have to move forward on a number of fronts, what I term "evolutionary pluralism".

Many polytechnics and colleges, in their responses, have said to us that the "great debate" is welcome, but should merely be part of a continuing dialogue. The CNAA is urging that a transitory forum should be established so that the views of the interested parties to this debate can be properly brought together.

For its part, the CNAA can only provide an enabling framework in the end, how far use is made of that framework is largely a matter for the institutions themselves.

BOOKS

Making mental calculations

by Maurice Chazan

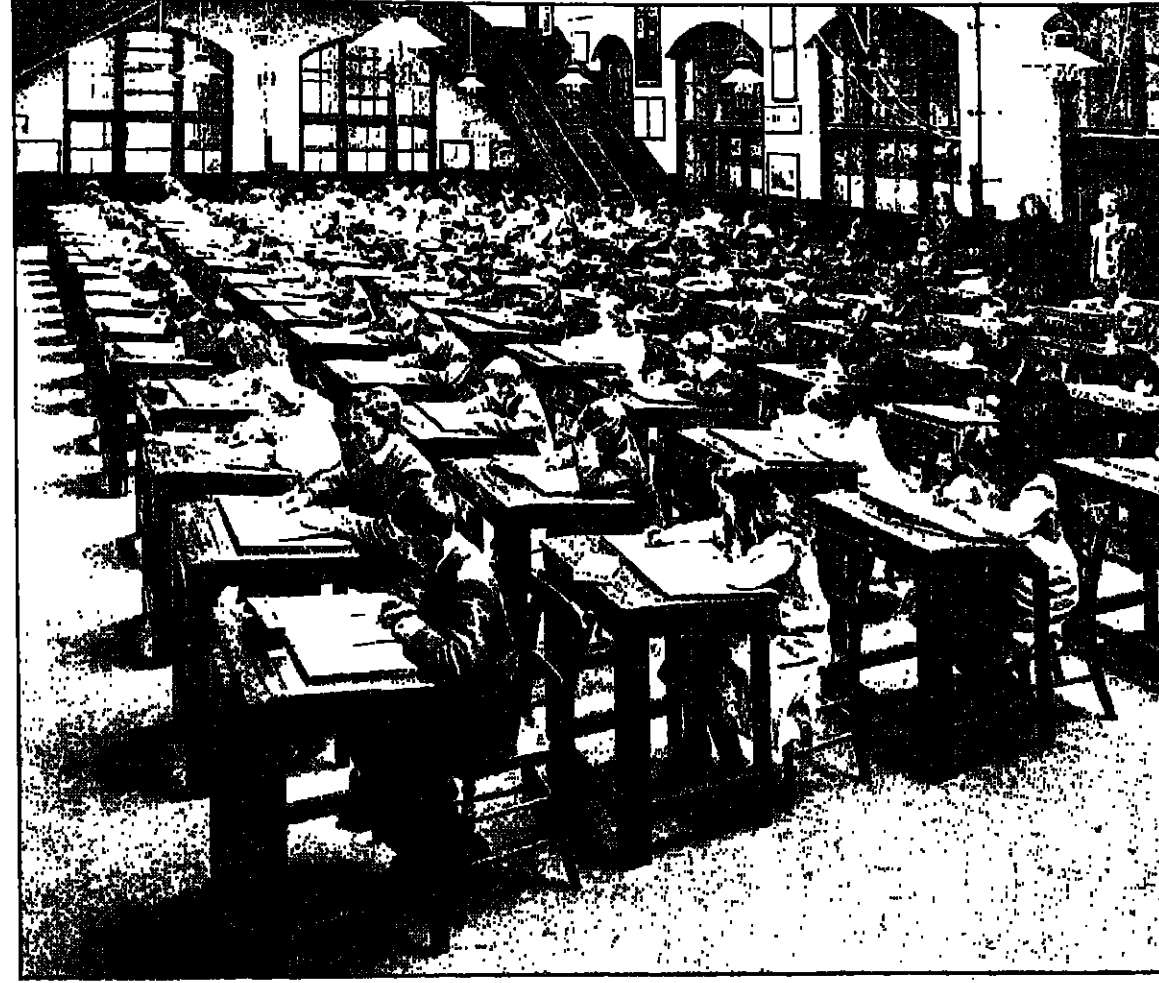
Ability, Merit and Measurement: mental testing and English education 1880-1940

by Gillian Sutherland
Clarendon Press: Oxford University Press, £25.00
ISBN 0 19 822632 2

Ever since intelligence tests were introduced into the educational system, their use has been controversial. With the development of comprehensive schools, most local education authorities in England and Wales have abandoned the 11-plus examination which in the past served as the main means of selecting children for different forms of secondary education. Even so, intelligence tests are still often used as an aid to grouping pupils within schools as well as in the identification and assessment of children with special educational needs.

Questions such as the validity of the concept of general ability, whether "intelligence" can be reliably measured and to what extent individual differences in ability are the result of genetic or environmental factors all continue to be the subject of debate – a debate which is not always conducted in an atmosphere of calm academic objectivity, but at times becomes heated and even acrimonious. This is not altogether surprising, since the issues involved cannot be divorced from ethical, social and political considerations. It is always useful to see such issues in their historical context, and so a warm welcome can be accorded to Gillian Sutherland's scholarly book, which aims to investigate the roles played by the idea and techniques of mental measurement in the English state education system in the late nineteenth and early twentieth century.

It should be noted that, despite the subtitle, Wales also receives some attention from the author. The work falls into two parts. The first three chapters deal with the beginning of classification in English state schools and the growing use of techniques of mental measurement in the identification of mentally handicapped children. As it was in this context that intelligence tests were first used in the public education system, Sutherland considers that tracing early developments in the ascertainment and care of subnormal children makes an appropriate introduction to the appropriate model of education in the case of "feeble-minded" educable children. Indeed, not enough basic information on intelligence tests is provided in this section, and some of the details given in chapter four, which introduces the



An examination at a Camberwell School, 1906

very smoothly with the first part. As the author herself acknowledges, the studies with different dynamics and crucially different rhythms of activity.

The chapters on mentally handicapped children form a valuable contribution to the literature, serving to remind us that many of our current concerns – such as integration, extravagant local authorities and financial constraints on educational developments – are not new. However, the discussion of mental testing is overshadowed by a consideration of questions relating to the growth of a national policy for subnormal children and an examination of the pressures leading to the greater involvement of education in the case of "feeble-minded" educable children. Indeed, not enough basic information on intelligence tests is provided in this section, and some of the details given in chapter four, which introduces the

second part of the book, could have been included earlier, with benefit to the reader.

The book goes on to discuss the development of individual and group techniques to measure intelligence in normal children, with an emphasis on the far-ranging influence of Godfrey Thomson and Moray House on the procedures adopted in the 11-plus examination in England, and to a lesser extent, in Wales. Sutherland dwells on the paradoxical situation in which Thomson was making a major contribution to the technology of mental measurement, while at the same time he was challenging the theoretical model of "general intelligence" put forward by Spearman and accepted by many at the time. Even though Sutherland went to considerable trouble to track down all possible sources of information, she found it extremely difficult to discover exactly how 11-

plus examinations were conducted between 1919 and 1939. Her painstaking attempts to provide a full picture of local education authority practices over the timespan covered were frustrated by "the incomplete and cryptic nature of so many Education Committee Minutes". She unearthed an extraordinary diversity of examination procedures among local education authorities; frequent changes of practice within individual authorities over the period; and widely differing perceptions of, and attitudes towards, the value of mental testing. Both the text and the numerous footnotes show that sources of all kinds have been looked at with a penetrating and critical eye, but even so, the author recognizes that some parts of her account may be open to challenge.

Sutherland's main thesis, on the basis of the evidence available to her, is that the mental testing scene was not

as neat and tidy as has been suggested by some other writers. She asserts that, in spite of the increasing focus on the selective process at 11 between the two wars, intelligence testing had not been adopted on such a wide scale and had not achieved such a dominance in i.e.a. practice by 1940 as has been commonly assumed.

Having declared her personal position at the outset – namely that in certain rather carefully defined situations, mental measurement does seem to have its uses – Sutherland's attempt to maintain a neutral stance in discussing issues that arouse considerable feelings has been reasonably successful. In the final chapter she does turn from objective description to an explanation of what she calls "the patchy and uneven understanding and reception of mental measurement in England" (the Welsh, according to her account, seem to have largely rejected or ignored mental testing as part of their 11-plus procedures). Sutherland explains the reaction of the English to mental measurement mainly in terms of the climax of their secondary education system. In her view, many of those in control of English education between about 1900 and 1940 considered that they could achieve their purposes without using the new tools and technology of mental testing, and in the interwar years English i.e.a.s continued to operate methods of selection which had their roots in patterns developed in the second half of the nineteenth century. This is an interesting thesis, but it is argued all too briefly and the book comes to a rather abrupt end.

Gillian Sutherland has written a very lucid book, which is fully documented and, in spite of careful attention to detail, never dull. Reading the book as a psychologist and not a historian, I was impressed with the way she has (with the help of others, especially Stephen Sharp) drawn on psychological as well as historical sources. I should have liked rather more detail than we are given on such topics as the weight given to intelligence tests in the 11-plus examination; the effects of the examination on children, teachers and parents; and the issues related to intelligence testing, for example the hereditary versus environment controversy. But perhaps this is asking too much: additional detail would have made for a much longer and more complex work. As it is, it can be recommended to all involved in the study of the psychology or history of education.

Maurice Chazan is professor of education at the University College of Swansea.

Classroom history

The Use and Abuse of History: or how the past is taught by Marc Ferro
Routledge & Kegan Paul, £15.95
ISBN 0 7100 9658 5

The Nuer are a pastoral people of the Upper Nile region. One of their traditional stories relates how once upon a time man's stomach used to live on an independent life in the bush, and used to live upon small insects roasted by the fire of the grasses. That is to say that man was not created with a stomach. It was created and existed apart from him. But one day man went walking in the bush and came across a stomach. He then put it in its present place and took on the responsibility of feeding it. But although, when the stomach lived by itself it was satisfied with tiny morsels of food, once it was installed inside man it became more demanding. No matter how much it ate it is always ready and craving for more.

A textbook was written a short while ago for pupils in Scottish secondary schools. It aimed at telling the story of Scotland and placing it against "its world background", so that the Romans, for example, are shown as a sort of backdrop for the Scots. It contained

the notable phrase, that the medieval Scottish peasant was "quite happy and content".

The story about the Nuer explains how they have always lived close to starvation and how food supplies have invariably been short. The remark about the medieval peasant in Scotland reveals that some teachers of history make easy assumptions about the past, so that their pupils may grow up to think of their country as one that has been especially favoured by providence.

It is the contention of Marc Ferro that the history which is taught to children is one which marks them for life. Our image of other peoples, and of ourselves, he believes, reflects this history and forms the roots of antagonism between nations. Therefore he has studied the means by which children are educated in a number of different countries. He has examined the textbooks, the stories and historical novels, the films and cartoons which are used in different parts of the world, such as South Africa and Black Africa, Trinidad, India, Soviet Russia, Japan, the United States and elsewhere. He is on the look-out for the falsification of the past, or for the assumptions that give a particular bias to the presentation of history. The result is a book that is filled with surprises.

Perhaps Ferro has an easy target when he looks at the books which are used by the white children of Johannesburg. It is natural that the Great Trek of 1838 should be presented as the fundamental issue in Afrikaner

adequate preparation for discussing the ways in which the British involvement in India is taught in British schools. Ferro prefers to give importance to the para-historical literature and to the works of such writers as Rudyard Kipling and Flora Annie Steel. But even supposing that this is a fair account of how British children learn about Britain in India, which it is almost certainly not, he seriously underestimates the awareness of complexity which was shared by both these writers. Simplistic historical accounts of British India may glorify the Clives or the Nicholson, but they also lay claim to longstanding British attempts to cultivate various forms and degrees of Indian independence. It is also curious to reflect on the official Indian desire to justify the unity of the sub-continent, which Ferro sees as depriving the peoples of India of part of their identity, when it was a common British idea that there were many Indias, "as multitudinous as the sands of the sea" was how Flora Annie Steel put it.

Thus Ferro cannot hope to dominate all the many national approaches to history that he explores. Oral history, which he frequently refers to, is bound to be fragmented, and the work of film-makers who ask individuals from primitive peoples to explain their understanding of the past is difficult to assess. In Ferro's own country, where audiences are highly sophisticated, it was always said that a film such as *Le Chagrin et la Pitié* came as a shock to young people. They were accustomed

to think that the story of the German occupation after 1940 was one in which the French were divided into two sides. There were the patriots, the Gaullists and the resistance fighters, and there were the collaborators and the supporters of Vichy. They were told in the film that during these years the majority of the French had only one idea in mind: finding enough to eat. But will this impression last? It can be that the legend of the heroic will continue to prevail, all the more so because they did exist and because they were ultimately successful.

Ferro thinks that the use of history will be bettered and that its abuse will be lessened if a more participatory form of history could be taught in schools. If questions are asked which pupils are able to answer from their existing knowledge, or as a result of investigations and discussions, however limited or localized, then understanding will replace information and truth might resist distortion. Doubtless this is so. But Ferro's ideas confirm how it is that when a historian works on a specific topic, then he can be realistic and objective in a deliberate and hard way. But when he considers the teaching of history then he falls into idealism and even into wishful thinking. He who teaches hopes.

Douglas Johnson

Douglas Johnson is professor of history at University College London.

Learning the lessons and looking ahead

the regulations are sometimes used in the validation process to stand in the way of course proposals. And it is also felt that the subject boards sometimes act inconsistently in their interpretation of the regulations. In short, there is a mismatch between the CNAA's policies and regulations on the one hand, and their implementation, especially by subject boards, on the other.

On this front, the CNAA has recently issued a letter to the principals and directors of all polytechnics and colleges. The letter serves as a covering letter to copies of the CNAA's responses to the NAB consultative paper, and to the UGC letter. But it also indicates that we wish to grapple with this matter with some urgency. In particular, we want to look very closely at three things.

First, the way in which fundamental assumptions about what constitutes degree level courses become embedded in the validation process, and act as unreasonable barriers to innovation. We would also want to consider whether the subject boards can be said to have shown an unreasonable degree of inconsistency.

Second, we will want to consider whether such fundamental assumptions should be opened up within the validation process; and whether in other words, such fundamental aspects of a course could become the object of negotiation between the course team and the visiting party. And that raises a fundamental question: is anything which should be considered as essentials, which should not, under any circumstances, be open to negotiation?

Third, the chief officer's letter indicates that we shall need to consider how the process of reviewing a course can be even more a genuinely open dialogue among peers.

Putting the issues in this way suggests the CNAA needs to recognize that the ways in which its validation processes are structured may act as barriers to innovation. And so we have also invited institutions to provide evidence of difficulties they have encountered which they think flow from unreasonable assumptions or inconsistencies within the validation process.

The third set of issues for future action is the structure of the CNAA's

undergraduate awards – and this seems to be an area in which some polytechnics in particular are themselves taking an initiative, by establishing for themselves an institution-based credit accumulation scheme, in which the awards of certificates, DipHE, degree and honours degree act as rungs in the ladder. And here the CNAA will want to review its certificate award, to see if its status needs to be sharpened in any way so as to assist developments of this kind.

The fourth area of future action is based on the view held by the CNAA that the CNAA can itself often perform a useful role in encouraging worthwhile innovations. And we believe that one area in which we might be able to develop a new area of flexibility is that of credit accumulation and credit transfer in general. Here there are, for us, two areas of potential innovation. The first is assisting institutions to develop methods of assessing the experiential learning acquired by prospective mature students. And we hope that it may be possible to develop these tools to enable mature applicants to be admitted with confidence to a mid-point of a course, in other words to be

BOOKS

Art of the impossible

The Philosophy of the Novel: Lukács, Marxism and the dialectics of form by J. M. Bernstein
Harvester Press, £25.00
ISBN 0 7106 0011 8

George Lukács's *The Theory of the Novel* is generally classed with its author's pre-Marxist works. Written in 1914-15, it was subsequently criticized by Lukács because of the limitations of its method, notably for being cut off from "concrete socio-historical realities" and for its combination of a "left" (Hegelian) ethics with a "right" (neo-Kantian) epistemology. It was only many years later, after his conversion to Marxism, that Lukács maintained he found the solution to the problems which the book confronted.

Nevertheless, as J. M. Bernstein points out, the book has had a great deal of influence on Marxist as well as non-Marxist aestheticians, and the purpose of *The Philosophy of the Novel* is to demonstrate the grounds for this influence. Bernstein's thesis is that Lukács's early theory, in spite of some of its conclusions, provides a solid basis for a properly Marxist theory of the novel, if it is read in the light of the author's later Marxist *History and Class Consciousness*. Bernstein thus offers a "philosophical reconstruction" of *The Theory of the Novel* which inserts it into the framework of a Marxist view of knowledge and history, translates it into more modern terminology, and criticizes and clarifies what he takes to be its inconsistencies and confusions.

Reread in this way, Lukács's text produces an argument that can be approximately summarized as follows. Capitalism, by subordinating human needs and values to the requirements of the market, produces a reified world in which value and meaningfulness can only be the subjective creation of individuals, not the intrinsic property of things. This world finds its epistemological expression in the philosophy of Kant, because of what Lukács calls Kant's "contemplative" standpoint, his thesis that intellectual forms are imposed by means of a priori mental categories on a life ruled purely by causal connections and essentially unintelligible. The novel is the principal ethical expression of this reified world stage, analogously to Kant's view of knowledge, its function is to impose a meaningful but subjective value-structure on an essentially

meaningless social reality.

The historical distinctiveness of the novel is clarified by Lukács through his "hermeneutical construct", as Bernstein terms it, of the ancient epic. The epic celebrates a world in which truth, order and value are perceived as of the nature of things. Epic art is not, therefore, autonomous, because it merely reproduces forms that are socially given. The art of the novel, on the other hand, is autonomous, because it creates forms that are independent of the real social world, and must necessarily do so because of the nature of this world under capitalism.

By enabling him to impose value on the world, the novel constitutes an ethical necessity for modern man. But such an imposition is inevitably problematic, because the world inevitably resists it. The novel, as Bernstein puts it, "thrives on its essential impossibility", the process of form-giving is constantly subverted by the contrary formlessness. Thus irony is a natural characteristic of the genre, as the means of acknowledging the unbridgeable gap between the world of fiction and the reality it purports to stand for.

Bernstein's rereading of Lukács is enormously more detailed, complex and technical than this summary might suggest. But it should at all events be clear that it represents a kind of study uncommon on this side of the Channel. The title follows Lukács's own description of *The Theory of the Novel* as a "historico-philosophical essay", and an approach of this kind to questions of literature is not one to which Anglo-Saxon philosophers or Anglo-American literary critics have been much given up to now. Bernstein's argument is, moreover, extremely abstract, even more so than Lukács's. The application of his theory to specific literary texts is scarcely considered; the only ones to receive close attention are Gustave Flaubert's *Sentimental Education* and René Descartes's *Discourse on Method*, the latter as the *ut*-novel in which the position of the novel proper was first mapped out.

Yet for all this, and in spite of being frequently difficult and somewhat repetitive to read, *The Philosophy of the Novel* is a rich and interesting book. While its validity must depend to a large extent on the validity of Marxist premises, it has a lot to say to literary theoreticians and critics of quite different persuasions. In particular it constitutes a powerful argument against the tendency to separate literary theory and criticism off from the broader areas of historical and philosophical study that it explores—though at the same time, perhaps, it illustrates through contrast the practical usefulness of such a separation.

David Robey

David Robey is a fellow of Wolfson College, Oxford.

Fame and rumour

Chaucer and the Imaginary World of Fame by Piero Boitani
D. S. Brewer, £27.50
ISBN 0 85991 162 4

A medieval poem in the form of a dream; not, however, on the usual May morning but on December 10. The poet is promised "hidings" of love, but he seems not to find any. He is carried through the air in the claws of a huge eagle, but Dante's eagle has become a pedant. We are given a vignette of Chaucer's home life while he was at the Customs House, but he knows nothing about his neighbours, evidently preferring to spend his evenings reading books. When he does arrive at his destination there is not one house but two: the palace of Fame and the revolving house of Rumour, temple of wigs left behind in Book One.

The poem breaks off tantalizingly just as a "man of great authority" is about to supply important information. The *House of Fame* is a most

pervasive poem. Modern critics like to claim that its apparent confusion and ambiguity are deliberate: that what we have is Chaucer's examination of the nature of poetry. This is too facile a conclusion for Piero Boitani. In two long chapters ("Homer to the Scholastics" and "The Fourteenth-Century Fame of Fame") he examines in some detail the tradition of fame and how it was transmitted to Chaucer's own time.

From the beginning fame can mean either "glory" or "rumour" good or bad; rumour as a monster we owe to Latin literature. For the moralists the discussion becomes polarized as the sinfulness of vainglory versus Christian immortality. This is how it reached the fourteenth century, the conflict being especially sharp in Petrarch. Most of the people Dante meets in hell want fame, but by the *Purgatorio* it is recognized that fame easily becomes vainglory and by the *Paradiso* that Dante must dispense fame correctly in order to gain salvation. Poets have become not only the recipients but also the creators of fame.

Certainly Chaucer has a "cultural affinity" with these fourteenth-century Italian writers, but traditions and affinities are slippery things to handle. Boitani is regularly illuminating on how the ideas in the *House of Fame* are used in Chaucer's other works and when he comes to consider the poem

itself he is particularly good on its imagery. Yet, even here, when Chaucer employs images from the tradition, traditional ways. In the final chapter, Three, are considering "the relationship between literature, language and reality". In so far as fame is material—truth or lies—comes from the house of twigs and flies straight back to the house of fame. I would agree, but the poem seems to me to examine the nature of fame—in both its senses—and only incidentally the nature of poetry.

In the last three chapters there are some fine perceptions, for instance the use of the archetypal imagery of cave, temple and labyrinth, Chaucer's construction of "his own timeless time", real-imaginary space, and the demonstration of how the *House of Fame* moves away from order towards disorder, from static iconography to movement, away from low, away from tradition. Perhaps Professor Boitani has really written two books: an examination of the tradition of fame and a critique of Chaucer's poem. I enjoyed both.

S. S. Hussey

S. S. Hussey is professor of medieval literature at the University of Lancaster.

DESERT SONG

BOOK & LYRICS BY
OTTO HARBACH
OSCAR HAMMERSTEIN 2ND
& FRANK MANDL
MUSIC BY
SIGMUND ROMBERG

Vocal Score (Complete) 24/-
Nephele, Philadelphia
The Desert Song 24/-
Romance 24/-
The Riff Song 24/-
Oven Alone 24/-
One Flower grows here in the Garden 24/-
Piano Solo for Desert Song 24/-

Sheet music from one of the most famous 1920s musicals, from *Operetta: a theatrical history* by Richard Traubner (Gollancz, 12.95).

ments. He is primarily concerned to trace, with Keatsian empathy, how these poets underwent the extreme experience of war, as recorded in their poems and Blunden's later prose. He does not stand back from the poetry, but rather attempts a total phenomenological absorption in it. At the same time he acknowledges that the experience is ultimately incommunicable to those who have not shared it. "In the end their experience remains secret: a secret even our compassion cannot claim fully to enter", Graham makes the attempt, nevertheless. He has a scholarly knowledge of the literary context of these poets; but, like Owen, he is more concerned with pity than with poetry, and he writes with great sensitivity and intensity.

Desmond Graham takes Owen's experience as exemplary, and sees Owen's form of protest as a model for war poetry. Reading Blunden in this light, I think, a slightly disquieting effect, but on balance is more illuminating than otherwise. Graham's section on Rosenberg is the shortest and least adequate; if Owen was almost overcome by war, Rosenberg tried to master and transcend it. He was intent upon a symbolic and mythic poetry, in which his war experience was only an element. Graham honestly acknowledges that his reading of Rosenberg is selective in a way that his reading of Owen is not. As his title suggests, he believes that there was such a thing as "the truth of war", and that Owen came closest to expressing it. He posits an absolute opposition between "experience", which is truth, and "ideology", which is lies. And yet not all serving soldiers reacted to the war in Owen's pacifist terms of outrage and compassionate protest. It was quite possible to experience the horrors of life at the front and remain a committed patriot, like T. E. Hulme in England and Ernst Jünger in Germany. Graham's opposition between truth and ideology is simplistic. Like all of us, he has his own ideology, and it takes the familiar form of blaming all the evils on "society". He writes of the sustaining mythologies of a society which brought about war, though on the following page he seems to achieve a more mature perspective when he writes of the Great War as "a specific manifestation of man's violence".

The war was indeed a great tragedy, and an overwhelming catalyst, like a huge natural disaster— which is rather how Rosenberg saw it. Human folly unleashed it, and once started it seemed impossible to stop. However, some poets might cry in anguish, "Christ, make it stop!" Other literary treatments of the war, notably Pound's *In the Potholes*, take a longer view. They are more aware of its paradoxes and contradictions than Owen was able to be, or Desmond Graham is in this good but partial study. It makes a valuable contribution to the study of war literature; but one needs to remember that there is no such thing as the truth of war, only truths, and they often conflict.

Dr Graham provides a close critical commentary on their poems directly concerned with the experience of war. He is a very acute and responsive close reader, who provides many new insights into apparently familiar texts. Illustrating Paul Fussell's thesis about the extent to which the poets of the First World War were using English literary tradition to interpret their experience, he reveals the presence of Keats in Owen, and of Chaucer and Shakespeare in Blunden. Graham's skill as a reader shows that there is still much life in the methods of the "old New Criticism", so frequently dismissed nowadays. Yet what he writes is not quite conventional criticism, where one looks for discriminations and judgements.

Warren Cherniak

Warren Cherniak is senior lecturer in English at Queen Mary College, London.

BOOKS

Humane voice

Jawaharlal Nehru: a biography Volume three: 1956-1964 by Sarvepalli Gopal
Cape, £18.00
ISBN 0 224 02216 4

When Jawaharlal Nehru died in 1964 he had been continuously at the centre of his country's political life for over forty years, at its apex for over thirty, and at the head of its government for all but eighteen. In the first volume of his biography Sarvepalli Gopal recounted the first 58 years that had been largely surveyed before. The rest has been new: volume two traversed the first half of the prime ministership, the third covers the last eight years.

At their opening the predominant themes had been set. Mahatma Gandhi had been dead since 1948; Vallabhbhai Patel since 1950. Nehru now towered on his own, his Congress Party remaining the dominant one

within India's political system. Socialism, land reform, planning and industrialization were all firmly in vogue, while in foreign policy a refusal to contemplate Pakistan's claim to Kashmir, anti-imperialism, non-alignment, support for the United Nations, and membership of the Commonwealth, were all well entrenched in his mind. In a masterly way Professor Gopal collates Nehru's dispersed thoughts on these and other topics, spread across a large personal correspondence, enmeshed in innumerable parliamentary speeches, and detailed in countless formal addresses, to let his master's voice speak wherever possible for itself.

That voice always strove to be, and ordinarily was, a superbly humane voice, passionate for good, questioning, evocative, yet quietly commanding. It was often couched in a prose and an oratory that could be intensely moving. Nehru had his weaknesses of course. No rogue himself, he always balked at seeing the rogue in any of his close associates, whether at home or abroad. Against the evidence he upheld Pratap Singh Kairon in the Punjab; against the odds he misjudged the world's other intellectual prime minister of his day, Zhou Enlai. "He had been dead since 1948; Vallabhbhai Patel since 1950. Nehru now towered on his own, his Congress Party remaining the dominant one

seriously mishandle important questions, such as India's population growth. As late as 1963 he was doubtful whether it posed any real problem at all.

But his infectious delight in children, his warmth for the seas of faces that peered up at him at the huge political rallies he presided over, his scrupulous care for the proprieties of parliamentary proceedings, his palpable concern for the peace of the world, his courtesy to intruding visitors — as one of them can readily testify — and actions like his despatch of a present of an alarm clock to the beleaguered Nobel laureate, Boris Pasternak, were all of a piece. "Universally you are recognized as one of the most powerful influences for peace and conciliation in the world," President Eisenhower wrote in 1962. Perhaps that was to be expected since as director of the Historical Division of India's Ministry of External Affairs from 1954-66, Professor Gopal was intimately involved in all these happenings and has long pondered their innumerable details. Both Nehru and Professor Gopal himself have in the aftermath been bitterly criticized for the lines they took at the time on these issues, and as a result this last volume is overpreoccupied with the — often good — case for the defence. Both the Chinese and Pakistani causes get short shrift, and the book is the poorer for that.

which went along with an unrelenting sense of duty, a response to large issues, an exercise of reason and unaffiliated intelligence in human affairs, an intense, but not exclusive, patriotism, and above

all, complete and transparent integrity... He consolidated a nation, trained it for democracy, constructed a model for economic development and set the country on the path to growth.

Professor Gopal gives detailed accounts of such episodes as Nehru's dealings with the Communist government in Kerala in the late 1950s, the Nagpur revolution on cooperative farming in 1959, India's participation in the Congo crisis of the early 1960s, the invasion of Goa, the Kamraj Plan of 1963, and so on. But this third volume, while regularly tracing the tortuous relationship with Pakistan over Kashmir, is dominated in the end by the growing rift in these years between India and China over their Himalayan frontiers, and the eventual Indo-China War of 1962. Perhaps that was to be expected since as director of the Historical Division of India's Ministry of External Affairs from 1954-66, Professor Gopal was intimately involved in all these happenings and has long pondered their innumerable details. Both Nehru and Professor Gopal himself have in the aftermath been bitterly criticized for the lines they took at the time on these issues, and as a result this last volume is overpreoccupied with the — often good — case for the defence. Both the Chinese and Pakistani causes get short shrift, and the book is the poorer for that.

because civil liberties were not underpinned by a widespread distribution of property... the effort at revolution from above... has been transformed into the protection of conservatism festooned with socialist trappings.

That needs must be part of Jawaharlal Nehru's final epitaph too.

More seriously there seems to be no space left in this extensive biography for the significant details on what — to deduce from other accounts — is arguably the much larger denouement to Nehru's preeminent career — his ultimate failure to overcome the checks to land reform. This was epitomized just a year before his death by his humiliating inability to secure a quorum of his own party for the Seventeenth Amendment Bill on the crucial definition for an equitable land reform of "an estate". It would have been, so Professor Gopal is at pains to say, very much better if India's early post-independence land reform had been immediately followed by a drastic land redistribution. Although he does not quite say how this might actually have been managed, he does aver that as a consequence...

because civil liberties were not underpinned by a widespread distribution of property... the effort at revolution from above... has been transformed into the protection of conservatism festooned with socialist trappings.

That needs must be part of Jawaharlal Nehru's final epitaph too.

D. A. Low

D. A. Low is *Smuts Professor of the History of the British Commonwealth at the University of Cambridge.*

Before the take-off

The Three Worlds: culture and world development by Peter Worsley
Weldenside & Nicolson, £16.95 and £8.95
ISBN 0 297 78346 7 and 78356 4

Twenty years ago, Peter Worsley first published his study *The Third World*. His new book, sufficiently close to it in title to cause confusion, differs in several ways from its predecessor. First, it is more theoretical, continuing the examination of Marxist theory begun in his *Marx and Marxism*. Second, it contains more information on Latin America and rather less on Africa, reflecting the quality and quantity of recent research. Third, there are longer discussions of the peasantry, the urban workforce, and the relationship between ethnicity and nationalism.

Much of the theoretical discussion comes at the start. As in his earlier book, Worsley argues that what gives Marxism its perennial appeal is not the scientific, objective correctness of its analytical categories or its predictive validity — Marx, Engels, Lenin and their successors were often simply wrong — but its vision of an alternative future, and its emphasis on the actors themselves creating their own destinies. This is despite the disputes of Marxist scholars, who pursue theoretical arguments at the expense of confronting reality, and despite the fact that many of the current varieties of Marxism are at best two-dimensional.

In particular Worsley attacks the conventional distinction between base and superstructure and the tendency to see the former as determinant. In order to be genuinely dialectical, sociology has to consider the relationships between all the attitudes, social institutions and values of individuals in all their complexity, and not just as the product of a one-way determinism. As a result, this turns out to be a profoundly Weberian book, not only in its methodology but also in its style of categorization and historical presentation.

The three chapters which form the core of the book are each enormously long and they deal in turn with the making of the peasantry, the making of the urban working class, and the relationship between ethnicity and nationalism. These chapters are again indeed written of a "radical ideological cleavage" between them. Individualist anarchists, nowadays mostly American, see society as consisting of rights-bearing hucksters, trading with each other in the market-place. Any interference with this process is invasion of private rights. All states, even minimal ones, are therefore illicit. Miller naturally points out the difficulties in such theories. Individualists tend to shrug off the crucial problem of maintaining a free market. They also assume that a state's most useful activities (protecting persons, property,

nomics become ever more dependent on it for food imports. The urban explosion in the third world during the twentieth century has reproduced the kinds of appalling living conditions and the kinds of "informal" economic activities documented by Henry Mayhew in nineteenth-century London, though for many of these urbanites there is little hope that economic take-off will lead either to their absorption into regular employment or to an improvement in their living conditions. There is, however, no simple relationship between deprivation and political action; protest is as likely to be articulated through primordial institutions such as those of Islam as it is through revolutionary Marxism.

Identities other than class, such as gender, ethnicity and nationalism provide the starting-point for chapter four. The importance of ethnic, racial and national identities has been increased by the import of cheap foreign labour by the industrialized countries, a process which has done little for economic development in the workers' home areas. The idea of the nation-state is itself recent, dating from the rise of the absolutist European monarchies of the fifteenth and sixteenth centuries, which resulted in the hegemonic imposition of a national culture. Worsley goes on to discuss liberal concepts of nationalism which developed during the enlightenment, and the ambiguous relationship between

Marxism and nationalism in the twentieth century, the rise of socialist internationalism being counterbalanced by the establishment of national versions of communism and by the increasing rivalry between China and the USSR. Finally he takes up the relationship between class formation and political systems. Socialist and communist systems have only made headway in countries with a well-developed class base. Elsewhere the most progressive regimes have presented populist versions of nationalism, but the trend has been for these to be replaced by inegalitarian and authoritarian military technocracies, often as a result of destabilization from outside.

This is a provocative and highly stimulating book. The body of work on which Worsley draws is quite vast, and there is hardly an important issue in the sociology of development which he does not touch on and illuminate in some way. It makes a powerful case for a blend of Weberian methodology with a humanistic Marxist idealism, not least in the final chapter with its belief that a more just and rational world order should be possible, even though one is left in no doubt as to the difficulties of achieving it.

J. S. Eades

J. S. Eades is lecturer in the department of sociology and social anthropology at the University of Kent.



Jawaharlal Nehru

Private interest

Anarchism by David Miller
Dent, £10.95 and £4.95
ISBN 0 460 10093 9 and 11093 4

Anarchist ideas, or at least "minimal-state" ideas, have become increasingly fashionable in recent years, perhaps because of the incredible dangers that existing states pose to the survival of mankind. David Miller has written a clear, well-structured introduction to the subject, both for students and general readers, which should do much to persuade them to take anarchist ideas more seriously.

Miller is particularly good at distinguishing between the various traditions of anarchist thought. He argues that individualist and communist anarchism have little in common, and indeed writes of a "radical ideological cleavage" between them. Individualist anarchists, nowadays mostly American, see society as consisting of rights-bearing hucksters, trading with each other in the market-place. Any interference with this process is invasion of private rights. All states, even minimal ones, are therefore illicit. Miller naturally points out the difficulties in such theories. Individualists tend to shrug off the crucial problem of maintaining a free market. They also assume that a state's most useful activities (protecting persons, property,

etc.) can be left to the market, or rather to private agencies that will provide protection, at a price. This, in Eric Hobsbawm's memorable phrase, is simply the "political theory of the Mafia". Finally, there is the famous "public goods" problem, nowadays familiar to us from Mancur Olson's work. According to this, private individuals will not voluntarily contribute to providing public goods like defence, parks, or clean air; yet the individualism rule out compulsory levies. Miller argues that this is the key weakness in the individualist's position. True, but it is also a problem for states. Public goods are not necessarily agreed, or beneficial; and in any case it is not usually states that provide them, but semi-independent corporations pursuing their own private interests without much accountability.

Communist anarchists, on the other hand, see man as a social animal, freely cooperating with others to achieve common ends. The public goods problem therefore disappears, since people are not selfish individuals and since they share key values or, at least, maintain effective informal social controls over each other. Miller argues that in an anarcho-communist society the main economic problem would be how to coordinate the various productive units' activities, without setting up dead weight on innovative political thinking for far too long. Miller sees current anarchism, apart from the individualists in America, as part of the post-1968 New Left, a simplification which leads him virtually to ignore the work of influential contemporary anarchists like Colin Ward. I also regretted that Miller did not discuss the recent academic literature on power or on rational choice

theory. After all, if power is already fragmented or illusory, the argument about anarchism becomes a good deal more relevant. And if rational choice is impossible, what price formal decision-making procedures? Most importantly, Miller does not seem to grasp that sovereign states are obsolescent. In the age of the global village, of unofficial economies and of heterogeneous societies, anarchy is not so unfamiliar as all that. Miller, however, takes refuge in "the fact of national identity", and proposes the "manifest desire of people everywhere to be self-governing" as a major justification for states. Anyone who spent the run up to the 1979 devolution referendum in Scotland or Wales may be permitted some doubts on this point.

There are some other weaknesses in the book. The historical and narrative sections are sometimes sketchy and derivative, with some obvious errors. The IWW were the Industrial Workers of the World, not the International Workers of the World; the unfortunate victim of the Red Brigades was not Francesco Cotta, chief magistrate of Geneva, but Francesco Cossu, chief procurator of Genoa. However, although readers interested in the history of anarchist movements will still be best served by George Woodcock or James Joll, Miller's book is excellent for students needing an impartial, intelligent survey of anarchist ideas.

Martin Clark

Dr Clark is lecturer in politics at the University of Edinburgh.

Defending reason

The Salamagundi Reader edited by Robert Boyers and Peggy Boyers
Indiana University Press, £16.25
ISBN 0 253 33060 3

Salamagundi is an American quarterly, not readily available in this country, which has maintained high intellectual standards while appealing to a general readership, since 1965.

Its tutelary spirit has always been Lionel Trilling, the subject of a book by its editor Robert Boyers, and it has sought to serve the aim Trilling suggested, in Arnoldian terms, for the "little magazine" in 1946: the cultivation of "mind", the encouragement of "discussion", a continuing conversation between writer and reader (or sometimes between writer and reader — a favourite form in *Salamagundi* is the symposium) about issues that matter. Its implied readership, like that of *Partisan Review* and *Kennedy Review* in their heyday, is a non-specialist intelligentsia, "those people who value their ability to live some part of their lives with serious ideas".

What especially characterizes *Salamagundi*, which explicitly announces itself as "a quarterly of the humanities and the social sciences", is its linking, again Arnoldian, of imaginative literature, culture, and society. Though the Reader is divided into two sections,

essays on "Culture and Politics" and essays on "Literature and Literary Theory", the same concerns, even the same names, crop up on both sides of the divide: George Steiner in part one, Frank Kermode in part two, Jacques Derrida and Trilling in part one, Roland Barthes and Walter Benjamin in part two.

Though *Salamagundi* is open to a wide variety of approaches — and indeed the list of contributors, which includes besides the names already mentioned Philip Rieff, Christopher Lasch, Saul Bellow, Gerald Craft, Edward W. Said, Erich Heller, and Tony Tanner, is both catholic and distinguished — a certain doctrinal line does emerge. In the course of the Reader's six hundred pages, for the editors and most of their contributors, the line between culture and anarchy is firmly drawn. Resolutely, they man the barricades against the forces of unreason, which beset for many of them to be largely represented by their students, who prefer to listen to rock music rather than their lectures; Neilsen Arnold nor Trilling was ever guilty of the rancour of complicity detectable in a number of the jeremiads in the first section — nailed to the wall beautifully in this exchange between V. S. Naipaul and his interviewer in the most entertaining of the book's symposia.

RB: Still, the experience of teaching bright students must have its pleasures.

VSN: Are they bright students? I don't know. I think it's bad to be mixing all the time with inferior minds.

One of the weaknesses of the symposium or interview as a literary form is

that it can easily degenerate into mutual congratulation: the critical faculty atrophies, dissolved in the warmth of praise. Naipaul, "determined to be quarrelsome", allows none of this, and the mutual annoyance of the participants whets the intelligence, clearing the mind of cant.

But most of the essays in the first section — Sir Isaiah Berlin on Vico and Voltaire, Peter Sedgwick on anti-psychiatry, Leslie Farber on lying and psychoanalysis, Boyers on political films — demonstrate the workings of the disinterested critical intelligence. Of the reflections on the counter-culture in the Reader, the best by far is Leslie Fiedler's essay, both witty and touching, where he confronts his own ambivalence towards the Apollonian and Dionysian, and seeks to provide a historical perspective by which contemporary phenomena can be understood.

The same qualities of critical intelligence are displayed throughout the second section, especially in its treatment of literary theory and contemporary American poetry. The gem of the collection is the beautifully written "Groping for Truth: a metaphor" by Gess, which by its profundity and ability to suggest unexpected connections to the reader could be said to justify the entire enterprise.

Warren Cherniak

Warren Cherniak is senior lecturer in English at Queen Mary College, London.

The poets' secret

The Truth of War: Owen, Blunden and Rosenberg by Desmond Graham
Corgene Press, £12.95
ISBN 0 85635 496 1

Desmond Graham is the author of an excellent biography of Keith Douglas, who is generally regarded as the finest poet of the Second World War, and he has edited Douglas's collected poems. In this short book he turns back to three poets of the First World War: Wilfred Owen and Isaac Rosenberg, who were killed in 1918, and Edmund Blunden, who survived the war and wrote a classic memoir of it in *Under-tones of War*.

Dr Graham provides a close critical commentary on their poems directly concerned with the experience of war. He is a very acute and responsive close reader, who provides many new insights into apparently familiar texts. Illustrating Paul Fussell's thesis about the extent to which the poets of the First World War were using English literary tradition to interpret their experience, he reveals the presence of Keats in Owen, and of Chaucer and Shakespeare in Blunden. Graham's skill as a reader shows that there is still much life in the methods of the "old New Criticism", so frequently dismissed nowadays. Yet what he writes is not quite conventional criticism, where one looks for discriminations and judgements.

Bernard Bergonzi

Bernard Bergonzi is professor of English at the University of Warwick.

Polytechnics continued

Sheffield City Polytechnic
LECTURER II IN COMPUTER STUDIES

A number of temporary one year appointments at LI grade exist in the Department of Computer Studies to teach Programming and/or Systems Analysis. Applicants should possess a relevant degree and be able to contribute to specialist teaching in Computer Studies to Degree level. Appointments will be for the academic year September 1984-August 1985.

Application forms can be obtained from:

The Personnel Officer, (Dept. THES) Sheffield City Polytechnic, Haffords House, Fitzalan Square, Sheffield S1 2BB or by telephone 0742-20911 Ext. 2387.

Closing date for applications 24th August.

Sheffield City Polytechnic is an equal Opportunities Employer. Applications from job sharers are welcome. (18718)

Brighton Polytechnic

FACULTY OF EDUCATION STUDIES
Department of Primary Education
Lecturer II in Primary Science and Technology
£7,215-£11,568

Required immediately to provide the biology input to the general science team.

Applicants who should be graduates with appropriate qualifications, recent school experience and relevant research interests, will be expected to have particular interest and experience of modern methods of primary science teaching.

Application forms and further details available from the Personnel Officer, Brighton Polytechnic, Moulsecomb, Brighton, BN2 4AT. Telephone: 093665 ext. 2836. Closing date 31 August 1984. (18728)

North Staffordshire Polytechnic
Department of Mechanical Engineering
READER

In Mechanical Engineering the principal duties will be to develop a research programme and to initiate and coordinate research and consultancy activity over a wide area.

The applicant's specific area of research will be in the area of CAD/CAM and computer applications.

Salary £12,515 - £15,744 p.a. (pay award pending).

EXPERIMENTAL OFFICER

In the area of CAD/CAM the principal duties will be to develop a research programme and to initiate and coordinate research and consultancy activity over a wide area.

The applicant's specific area of research will be in the area of CAD/CAM and computer applications.

Salary £12,515 - £15,744 p.a. (pay award pending).

The post will involve a degree and have real autonomy and opportunity for the right candidate.

Candidates should hold a degree and have real autonomy and opportunity for the right candidate.

Salary in the range of £10,500 - £12,515 p.a. (pay award pending).

Application forms and further particulars for both the above posts are available from the Personnel Officer, North Staffordshire Polytechnic, College Road, Stoke-on-Trent, ST4 4ST. Tel: (0783) 43531. Ext. 911.

Closing date: 2nd September 1984. (11092)

Kingston Polytechnic
Faculty of Business and Social Sciences
Lecturer II in ACCOUNTANCY

Applicants should be graduates in Accounting and/or have professional accounting qualifications. Preference will be given to candidates who have a degree in Accounting and/or have a postgraduate qualification in Accounting.

Application forms and further particulars are available from the Personnel Officer, Kingston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

North Staffordshire Polytechnic
Department of Electrical and Electronic Engineering
RESEARCH ASSISTANT

Salary £4,947 - £5,648 p.a. (pay award pending). The post is for an initial period of two years with the possibility of an extension for a further year.

Applicants should have a degree in Electrical and Electronic Engineering and be able to undertake research work in the area of CAD/CAM and computer applications.

Salary £4,947 - £5,648 p.a. (pay award pending).

Oxford Polytechnic
Faculty of Educational Studies
LECTURER II/SENIOR LECTURER

CHILDREN WITH SPECIAL NEEDS: REF 97/77

Applications are invited for an appointment as Lecturer II or Senior Lecturer in the Department of Educational Studies, Oxford Polytechnic, to teach and supervise the work of students on the course for Children with Special Needs.

Applicants should have a degree in Educational Studies and be able to undertake research work in the area of Children with Special Needs.

Salary £7,215 - £11,568 p.a. (pay award pending).

Application forms and further particulars are available from the Personnel Officer, Oxford Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

North Staffordshire Polytechnic
Computing Services, Blackheath Lane, Stafford
PROJECTS MANAGER (SENIOR LECTURER)

Salary £10,500 - £12,515 p.a. (pay award pending).

A vacancy has arisen for a Projects Manager who will be responsible for the development and management of the Computing Services at Blackheath Lane, Stafford.

Applicants should have a degree in Computing and be able to undertake research work in the area of Computing Services.

Salary £10,500 - £12,515 p.a. (pay award pending).

Application forms and further particulars are available from the Personnel Officer, North Staffordshire Polytechnic, College Road, Stoke-on-Trent, ST4 4ST. Tel: (0783) 43531. Ext. 911.

Closing date: 2nd September 1984. (11092)

PLEASE MENTION THE T.H.E.S. when replying to advertisements

Preston Polytechnic

The following vacancies exist in various schools as shown below:

School of Art
PART-TIME LECTURERS IN THE SESSION 84/85

One part-time Lecturer in Painting (Autumn term) Ref AA/139.

Two part-time Lecturers in Print Making (Autumn term) Ref AA/140.

One part-time Lecturer in Sculpture (Autumn term) Ref AA/141.

One part-time Lecturer in Fashion Design (Autumn term) Ref AA/142.

One part-time Lecturer in History of Modern Art (Autumn term) Ref AA/143.

C.V. together with samples of work should be forwarded to the address below by 24th August 1984. Ref. No. AA/139-143.

Applications are invited for a TEMPORARY ASSOCIATE LECTURESHIP (0.5)

In Secretarial and Office Studies for one year only from 1st September 1984. Ref. No. AA/144.

Preference will be given to candidates who have a degree in Secretarial Studies to an advanced level, including Teeline System.

Salary Scale: L11 - £7,215 - £11,568 (Award pending).

Please quote Ref No. AA/144.

Closing date 24th August 1984.

School of Economics and Business Studies
TEMPORARY LECTURESHIP IN ECONOMICS

For one year from 1st September 1984. Ref. No. AA/145.

Applicants should be able to teach on a range of courses at both degree and Sub-degree level.

Salary: L11 - £7,215 - £11,568 (Award pending).

Please quote Ref No. AA/145.

Closing date 24th August 1984.

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Oxford Polytechnic
Faculty of Educational Studies
LECTURER II/SENIOR LECTURER

CHILDREN WITH SPECIAL NEEDS: REF 97/77

Applications are invited for an appointment as Lecturer II or Senior Lecturer in the Department of Educational Studies, Oxford Polytechnic, to teach and supervise the work of students on the course for Children with Special Needs.

Applicants should have a degree in Educational Studies and be able to undertake research work in the area of Children with Special Needs.

Salary £7,215 - £11,568 p.a. (pay award pending).

Application forms and further particulars are available from the Personnel Officer, Oxford Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

Closing date: 2nd September 1984. (11092)

North Staffordshire Polytechnic
Computing Services, Blackheath Lane, Stafford
PROJECTS MANAGER (SENIOR LECTURER)

Salary £10,500 - £12,515 p.a. (pay award pending).

A vacancy has arisen for a Projects Manager who will be responsible for the development and management of the Computing Services at Blackheath Lane, Stafford.

Applicants should have a degree in Computing and be able to undertake research work in the area of Computing Services.

Salary £10,500 - £12,515 p.a. (pay award pending).

Application forms and further particulars are available from the Personnel Officer, North Staffordshire Polytechnic, College Road, Stoke-on-Trent, ST4 4ST. Tel: (0783) 43531. Ext. 911.

Closing date: 2nd September 1984. (11092)

Colleges and Institutes of Higher Education

SENIOR LECTURER IN DISTRICT NURSING
RE-ADVERTISEMENT

Salary £10,683 - £13,443

Applications are invited from well qualified and experienced district nurse tutors. The successful applicant will be the section leader for the Teachers Certificate course for intending District Nurse Health Studies courses.

Applicants must hold the appropriate qualifications required by the UKCC/English National Board. Salary £7,215 - £11,568

Applications are invited from graduates in Psychology for this established post for commencement not later than 1st January 1985.

The post is located in the Department of Psychology and Health Studies where the appointee will contribute to full-time and part-time honours degree courses in Psychology (CNA) and possibly contribute to professional courses in Health Studies.

Applicants should have relevant postgraduate experience in EITHER an area of applied social/developmental psychology OR the ergonomics/information technology area.

TEMPORARY LECTURER II IN EDUCATION STUDIES AND EDUCATIONAL PSYCHOLOGY

The successful applicant will assume teaching and supervisory responsibilities in relation to Pre-Service and In-Service Courses for Further Education Teachers for the session 1984-85.

FINANCE OFFICER - GRADE S02

Salary £9,945 - £10,539

The person appointed will be required to provide advice on all aspects of the financial administration of the Institute. He/she will prepare budgetary estimates, assist in exercising budgetary control and maintain all necessary accounting records. Applicants should have appropriate experience and qualifications such as membership of a relevant professional body - experience of computerised accounting systems will be an advantage.

Further details and application forms may be obtained from the Deputy Registrar, to whom completed applications should be returned by 24th August 1984.

London City College

Part-time and possibly full-time lecturers required for September start in: Advertising, Media, Business Studies, Subjects, Banking, Computing, Hotel & Catering, Shipbuilding, etc.

Apply in writing with full CV to Registrar, London City College, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

REMINDER

COPY FOR CLASSIFIED ADVERTISEMENTS IN THE T.H.E.S. SHOULD ARRIVE NOT LATER THAN 10AM MONDAY PRECEDING PUBLICATION

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

Librarians

Trinity College
Cambridge CB2 1TQ
MANUSCRIPT CATALOGUER

Applications are invited for the post of Manuscript Cataloguer in the Wren Library, to be responsible for the processing of a rapidly growing collection of nineteenth and twentieth-century papers. Relevant experience and ability to type are both required.

Salary in the region of £7,500.

Further details are available from the Librarian, to whom written applications giving the names and addresses of two referees should be made by 14th September 1984. (18729)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

The Polytechnic is being renamed Lancashire Polytechnic from September 1st, 1984. (11093)

Application forms and further details are available from the Personnel Officer, Preston Polytechnic, 100, Richmond Road, Kingston, Surrey, KT1 1AA. Tel: (0181) 5466. Ext. 287. (11079)

Research and Studentships

THE UNIVERSITY OF MANCHESTER
Centre for Urban and Regional Industrial Development

Applications are invited for the following posts tenable initially for one year from September 1st, 1984.

1. Research Fellow
(Technology Transfer)

The appointee would be expected to work with industry in the Greater Manchester area to establish mechanisms for the effective transfer of University-generated academic expertise. Previous practical experience in the field of technical transfer would be a considerable advantage as would a familiarity with academic work on technology transfer issues. Initial salary range £10,710-£11,815 pa (Superannuation).

2. Research Associate
(Marketing Policy)

The appointee would be required to explore ways in which University-generated information and expertise could be made available to local business enterprise to assist with more effective marketing and product development. A background in marketing, particularly with reference to the small firm, together with some research experience would be essential. Initial salary range £7,190-£8,530 pa (Superannuation).

3. Research Associate
(Data Base Systems Design)

The appointee would have primary responsibility for the effective design and implementation of a data-base management system for the storage and retrieval of data on academic expertise and intellectual property for the University in Manchester, UMIST and the Manchester Business School. The system would be based on PRIME/EX and dedicated toward interactive retrieval in response to enquiries from both inside and outside the institutions. The appointee would be most appropriately filled by a graduate with an interest in pursuing research into applied data base management systems. Initial salary range £7,190-£8,530 pa (Superannuation).

Applications should be sent by August 17th 1984 to: The Director, Centre for Urban and Regional Industrial Development, Manchester Business School, The University, Manchester M13 9PL from whom further details are available. (18728)

University of
St Andrews
Department of Biochemistry & Microbiology
RESEARCH ASSISTANTSHIP

Applications are invited from graduates in Biochemistry, Chemistry or Physics for a Research Assistantship for a period of three years. The appointee will be involved in the application of electron